CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, February 11, 1909.

CONTENTS.

CONSTRUCTION NEWS:
Plans and Specifications on File..... 43
List of Contracts Pending..... 43
Railways..... 43
Electric Railways..... 43
Light and Power Plants..... 44
Bridges..... 45
Buildings..... 45
Water Supply and Irrigation..... 47
Sewerage..... 47
Garbage Disposal..... 47
Streets and Roads..... 47
Manufacturing Plants..... 48
Miscellaneous Contracts..... 49
CIVIL SERVICE EXAMINATIONS..... 49
INDUSTRIAL NOTES..... 49
PROPOSALS..... 50

CONSTRUCTION NEWS.

Plans and Specifications on File.

(denotes that this work is advertised in Engineering News.)*

The following plans (P.) and Specifications (S.) are on file and may be seen at office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Work.	See issue.
2-15	Sewers, Atlanta, Ga.....(S.)	2- 4
2-20*	W.-Wks., Webster, N. Y.(P.& S.)	2- 4
3- 1	Pavement, etc., Oxford, Miss.(S.)	2- 4
3- 1*	Power plant, Lethbridge, Alta.(S.)	1-21

List of Contracts Pending.

LIGHT, HEAT AND POWER PLANTS.

2-15	Elec. equip., Yukon, Okla.....	1-21
2-16	Lighting fixtures, New York.....	2-11
2-17	Light plant, Chicago, Ill.....	1-21
2-17*	Light plant, Milwaukee, Wis....	1-28
2-17	Lighting, heating, etc., Richmond, Ky	1-28
2-18	Power equipment, Calgary, Alta..	1-28
2-18	Wiring, etc., Cincinnati, Ohio..	2-11
2-24	Conduits, etc., Albany, N. Y.....	2-11
3- 1*	Power plant, Lethbridge, Alta...	1-21
3- 2	Wiring, etc., Atlanta, Ga.	2- 4
3-22	Elec. supplies, Wash., D. C. ..	2- 4

BRIDGES.

2-12	Bridges, Grand Fork, N. Dak. ..	2- 4
2-12	Bridge, Dungannon, Va.....	2-11
2-15	Abutments, East Palestine, O....	2- 4
2-15	Abutments, Norwalk, Ohio.....	2- 4
2-15	Viaduct, Lynchburg, Va.	2- 4
2-16	Bridges, Waseca, Minn.	2- 4
2-20	Bridge work, Cleveland, Ohio...	1-28
2-20	Bridge, Hanover, Ill.....	2-11
2-24	Bridges, Tulsa, Okla.....	2-11
3- 2	Bridges, Faulkton, S. Dak.....	2-11
3- 3	Bridge work, Cleveland, Ohio....	2- 4
3- 4	Bridges, Paris, Ark.	12-17
3- 5	Bridge bonds, Coshocton, Ohio...	2-11
4- 5	Bridge, etc., Harrisonburg, La..	2- 4

BUILDINGS.

2-12	Library, Cleveland, Ohio.....	1-28
2-15	Post-office, Shenandoah, Iowa....	1-14
2-15	School, Grand Rapids, Mich.	1-14
2-15*	Quarters, Ft. Dupont, Del.....	1-21
2-15*	Quarters, Fort Monroe, Va.....	1-21
2-15	Hospital, Patton, Cal.	2- 4
2-15	Building, Peoria, Ill.	2- 4
2-15	Jail equip., Plymouth, Mass. ...	2- 4
2-16	School, San Bernardino, Cal....	2- 4
2-16	Post-office alterations, Wheeling, W. Va.	2- 4
2-16*	Coping, Washington, D. C.....	1-14
2-16	Jail, Youngstown, Ohio	2- 4
2-17*	Post-office, Salisbury, N. C.....	1-14
2-17	Hospital, Nashville, Tenn.....	2-11
2-17	School, Monongahela, Pa.....	2-11
2-18*	Post-office, Greenville, Miss.....	1-21
2-18	Court-house, Newton, Iowa.....	1-28
2-20	Post-office, Bar Harbor, Me.....	1-21
2-20	Plans, Port Arthur, Ont.....	1-28
2-20	Plans, etc., Woodstock, Ont.	2- 4
2-23	Sale of buildings, Los Angeles, Cal	2- 4
2-23	Buildings, Los Angeles, Cal.	2- 4
2-23	Building, Abilene, Tex.	2- 4
2-23	Building, Dodge City, Kan.....	2- 4
2-23	Post-office, Roanoke, Va.....	1-21
2-23*	Court-house, Omaha, Neb.....	2-1
2-24	Buildings, Albany, N. Y.....	2-11
2-24	Riding hall, West Point, N. Y...	2-11
2-24	Jail, Rochester, N. Y.....	2-11
2-25	Ward, Hot Springs, S. Dak.	2- 4
2-27	Town hall, Northfield, Ohio.....	2-11
3- 1	Stable, Ft. Snelling, Minn.....	2-11
3- 1	Court-house, Twin Falls, Idaho..	2-11
3- 1	Bakery, Ft. H. G. Wright, N. Y. (Mfg. Pl.)	2-11
3- 1*	Factory, Syracuse, N. Y. (Mfg. Pl.)	2-11
3- 1*	Coal shed, Tiburon, Cal.	2- 4
3- 1	Post-office, Gadsden, Ala.	2- 4
3- 1	Machinery, Maxton, N. C. (Mfg. Pl.)	1-21
3- 3	Post-office, etc., Augusta, Me...	1-28
3- 5	Office plant, Hot Springs, S. Dak. (Mfg. Pl.)	2-11
3- 8	Heating, ventilating, Atlanta, Ga.	2- 4
3- 8	Post-office, Elizabeth, N. J.....	2-11
3-10	Shops, Winnipeg, Man. (Mfg.Pl.)	2-11

WATER-WORKS.

2-12	Cast-iron pipe, Cincinnati, O..	2- 4
2-12	Pipe and specials, Boston, Mass..	2-11
2-15	Water-works, Haskell, Tex.....	2- 4
2-15	Water-works, Itta Bena, Miss..	2- 4
2-15	Reservoir, New Ulm, Minn.	1-21
2-15	Water-works, Sebree, Ky.....	1-21
2-17	Water supply, Elkhart, Ind.....	2- 4
2-17	W.-Wks., International Falls, Minn	2-11
2-19	Cocks, Elyria, Ohio.....	2-11
2-19	W.-Wks., Decatur, Ill.....	2-11
2-20*	W.-Wks., Webster, N. Y.....	1-28
2-22*	Pump, Winnipeg, Man.....12-	3
2-24*	Pumping engine, Saskatoon, Sask.	2- 4
2-24	Pumping plant, Owosso, Mich....	2-11
3- 1	Water main, Milwaukee, Wis...	2-11
3- 1	Pump, Muskogee, Okla.....	2-11
3- 1*	Filtration plant, Rock Island, Ill.	2- 4
3- 4	Water tank, Fort Assiniboine, Mont	2-11
3-11*	Enlarging dam, Lebanon, Pa.....	2-11
3-15	Water-works, Wichita, Kan.....	1-21
5- 5	Pumping machinery, Petaluma, Cal	2-11

SEWERS.

2-12	Sewer brick, etc., Minneapolis, Minn.	2- 4
2-12	Sewers, St. Joseph, Mo.	2- 4
2-15	Sewer system, Santa Cruz, Cal..	1-28
2-15	Sewer, Great Falls, Mont.....	1- 7
2-15	Sewers, etc., Atlanta, Ga.	2- 4
2-16	Sewers, Ashtabula, Ohio	2- 4
2-17	Sewers, etc., East St. Louis, Ill...	1-21
2-17*	Sewers, Baltimore, Md.....	1-28
2-18	Sewers, Buffalo, N. Y.....	2-11
2-20	Sewer, Denton, Tex.	2- 4
2-24*	Sewers, etc., King's Park, N. Y..	2-11
2-24*	Sewer, etc., Rochester, N. Y....	2-11
2-26	Sewer, Louisville, Ky.....	2-11
3- 1	Sewer, New London, Conn.....	2-11
3- 2	Sewer, Newburgh, N. Y.....	1-28
3- 8	Sewer, Grundy Center, Iowa.....	1- 7

STREETS AND ROADS.

2-12	Road, Fowler, Ind.....	1- 7
2-12	Roads, Lafayette, Ind.....	1-28
2-12	Paving blocks, etc., Minneapolis, Minn.	2- 4
2-13	Turnpike, Youngstown, Ohio.....	2-11
2-15	Grading, etc., Norwood, Ohio....	2-11
2-15	Sidewalks, etc., Opelousas, La...	2-11
2-15*	Repaving, Philadelphia, Pa.....	2-11
2-15	Crushed stone, etc., Easton, Pa..	2-11
2-15	Street impvt., St. Paul, Minn....	1-28
2-15	Pavement, Paris, Ill.....	1-28
2-15*	Concrete walks, Whipple Barracks, Ariz.	1-21
2-15	Macadam, Upland, Cal.	2- 4
2-15	Paving blocks, Savannah, Ga. ..	2- 4
2-16	Road repair, Milford, Ohio.....	1-28
2-16	Road, Fort Lawton, Wash.....	2-11
2-16	Paving, Houston, Tex.....	2-11
2-16	Pavement, etc., Kansas City, Mo.	2-11
2-16	Paving, Toledo, Ohio.....	2-11
2-17	Road impvt., St. Bernard, Ohio..	1-28
2-17	Regulating, etc., Brooklyn, N. Y.	2- 4
2-17	Grading, etc., Cleveland, Ohio..	2- 4
2-18	Road, Greenfield, Ind.....	1-28
2-18	Street impvt., Oakwood, Ohio....	1-28
2-18*	Paving, etc., Greenwood, S. C...	1-28
2-18	Road, Spencer, Ind.....	1-14
2-18	Macadam road, Greenfield, Md..	2-11
2-19	Road impvt., Cincinnati, Ohio...	2-11
2-20	Sidewalks, Lake Village, Ark...	2- 4
2-24*	Asphalt, Winnipeg, Man.....	2-11
2-25	Concrete walks, Ft. William, Me.	2- 4
2-27	Curbing, etc., Newton, Ohio.....	2-11
2-27	Grading, etc., Newton, Ohio.....	2-11
3- 1	Road, Columbus, Ind.....	2-11
3- 1	Roads, Danville, Ind.....	2-11
3- 1	Roads, Mooresville, N. C.....	2-11
3- 1	Road, Portsmouth, Va.....	2-11
3- 1	Pavement, etc., Oxford, Miss...	2- 4
3- 2	Roads, Bloomfield, Ind.....	1-28
3- 2	Roads, Vincennes, Ind.....	2-11
3- 2	Roads, Crawfordsville, Ind.....	2-11
3- 4	Road, Wabash, Ind.	2- 4
3- 4*	Paving, Corning, N. Y.	2- 4

MISCELLANEOUS.

2-11	Ditch, Redwood Falls, Minn.....	2-11
2-11	Piles, Bay City, Mich.....	2-11
2-12*	Pier, dredging, Milwaukee, Wis.	1-21
2-12	Cement, Minneapolis, Minn.....	2- 4
2-12	Grand stand, Ottawa, Ont.....	2- 4
2-13	Drydock, Hawaii 12-	17
2-15	Piles, Superior, Wis.	2- 4
2-15	Tile drain, Jefferson, Iowa.....	1-28
2-15	Monument, Indianapolis, Ind.....	1-14
2-16*	Repairing pier, Frankfort, Mich.	1-21
2-16	Tile drain, Jefferson, Iowa.....	1-28
2-16	Repairing foundation lock, Ottawa, Ont	2-11
2-16	Automobile, Cincinnati, Ohio....	2-11
2-17	Cement, etc., Baltimore, Md.....	2-11
2-17	Drainage, Hampton, Iowa.....	2-11
2-18	Fences, Fort Barrancas, Fla....	1-28
2-18	Electric Railway materials, Calgary, Alta.	2- 4
2-18	Ditch, Fowler, Ind.....	2-11
2-19	Ditch, Elbow Lake, Minn.....	2-11
2-22	Timber, Ottawa, Ont.....	2-11
2-23	Cleaning ditches, Harvel, Ill....	2-11
2-24	Hose wagons, Winnipeg, Man....	2-11
2-25	Pier, San Francisco, Cal.	2- 4
2-27	Ditch, Newtown, Ohio.....	2-11
3- 1	Coal shed, California City Point, Cal	2-11
3- 2*	Telephone line, Winnipeg, Man..	2-11
3- 3	Drainage ditches, Emmetsburg, Iowa	2-11
3- 5	Repairing dikes, etc., Savannah, Ga	2-11
3- 5	Stone, Grand Rapids, Mich.....	2-11
3- 5	River impvt., Buffalo, N. Y.....	2-11
3-17	Mooring stones, Portland, Me...	2-11

CIVIL SERVICE.

2-17	Engr., Fort Berthold, N. D.....	1-21
2-24	Scientific Asst., Wash., D. C.....	1-21
2-24	Laboratory aid, Columbia, Mo....	1-21
2-24	Topographic aid, Washington, D. C	1-28
2-24	Junior chemist, Washington, D. C	1-28
2-24	Computer, Washington, D. C....	1-28
2-24	Asst. bacteriologist, Washington, D. C.....	1-28
2-24	Examiner, Ore. Wash.	2- 4
2-27	Supt. Highways, Albany, N. Y..	2- 4
2-27	Resident Engr., Albany, N. Y...	2- 4
3- 3	Chemical Biologist, Wash., D. C.	2- 4
3-17	Practical Miner, Wash., D. C..	2- 4
3-17	Aid in Zoology, Wash., D. C. ...	2- 4
3-17	Timber cruiser, Wash., D. C.	2- 4

FOREIGN.

2-15	Electric railway, Algeria 12-	31
3- 1	Floating dock, Egypt 12-	31

RAILWAYS.

(denotes that this work is advertised in Engineering News.)*

ABBEVILLE & NORTHWESTERN.—This company plans to build a railroad, about 75 miles long, from Abbeville, Ga., via Pineview and Unadilla, to Fort Valley, Ga., 58 miles; and a branch from Emerich to Montezuma, Ga., 17 miles. The authorized capital is $100,000. Headquarters are at Abbeville, Ga. The incorporators are J. L. Bankston, W. A. Cherry, T. R. Moye, E. M. Carnes, Hal Lawson, W. H. Wilkinson, M. B. Cannon, J. B. Girrardeau, C. F. Chapman and W. L. Harrell, all of Abbeville. Noted on Dec. 31.

ALGOMA CENTRAL & HUDSON BAY.—Surveys have been made for an extension from the present end of track at Mile, 69.35 miles, at the Chippewa River, Ont., north to Michipicoten, mile 103.65. As noted on Dec. 24, "no construction work is under way at the present time, as the extension has not yet been definitely decided upon." C. N. Coburn is Ch. Engr., Sault Ste Marie, Ont.

CANADIAN NORTHERN.—D. D. Mann, Vice-Pres., Toronto, Ont., has announced that he will recommend to the company that engineers be placed in the field at once to locate the line to the Pacific Coast. The company has 3,000 miles of line in operation, and 2,000 more miles financed, and when it commences building to the Coast it will maintain an average of building a mile a day.

CANADIAN PACIFIC.—Plans have been outlined by William Whyte, Second Vice-Pres., for work in the West. The sum to be expended in construction work in the western provinces is in the neighborhood of $6,000,000, the plans including construction of about 300 miles of additional line. The most important piece of work will be building a line north through Alberta from Lethbridge, parallel to the Crow's Nest line, and traversing a country at present without railway facilities. About 130 miles of the line from Saskatoon to Wetaskiwin, which still remains to be built will be completed, thus affording an alternative route to Edmonton. In the same district, continuation of the line between Moose Jaw and Lacombe will also be undertaken. This line at present is constructed southward from Lacombe to a point near Stettler, and northward from Moose Jaw to a point near Tugaske. Construction will be continued southward from Stettler in a direction practically parallel to the Saskatoon Wetaskiwin line. The work of double tracking the line between Fort William and Winnipeg, which has been going on for some time will be completed. About 18 miles of this remains to be done, and upon its completion the Canadian Pacific will have a continuous double track line between these points, 426 miles in length, with maximum grades cut down from one-half to one per cent. eastwards and one per cent. westwards to four-fifths of one per cent. either way. Surveys have been completed for a line from Weyburn to Lethbridge, through Southern Saskatchewan and Alberta, altogether about 400 miles. The first 30 or 40 miles of road will be completed within the year. J. G. Sullivan, Montreal, Que., is Ch. Engr.

COLORADO & SOUTHERN.—It is stated that between May and September this company will build from Pueblo to Walsenburg, 58 miles, at a cost of $1,500,000, and from Fort Collins to Cheyenne, 35 miles, at a cost of $650,000. Surveyors are in the field; and it is said that the contract will be let and the work begun by May 1. Noted on Jan. 28.

GARDEN CITY, GULF & NORTHERN.—Contract for construction of the line from Garden City to Scott City has been awarded to the KANSAS CONSTRUCTION & IRRIGATION CO., B. M. McCue, Pres. The contract provides that the road must be completed and in operation by Dec. 31. Engineers are making the location surveys and they have about completed it from Scott City to the north line of Finney County. Work on construction will be started soon.

JOLIETTE & LAKE MANUAN COLONIZATION.—Application has been made to the Canadian Parliament for an extension of time to build from Joliette, Que., northerly to Ste. Emilie de l'Energie, thence north and northwesterly to St. Michel des Saints and to Lake Manuan, about 150 miles. Desaulniers & Vallee, Montreal, Que., are Solicitors for the company.

LARAMIE, HAHNS PEAK AND PACIFIC.—Company has 15 miles under construction and 40 miles in operation. There is a section of 55 miles yet to be constructed and the company is ready to receive bids for grading this section. No contracts have been let, with the exception of some clearing contracts. R. D. Stewart, Laramie, Wyo., is Gen. Supt. and Ch. Engr.

NORTH CAROLINA.—John F. McNair, of Laurinburg, N. C., and associates expect to build a railroad from Laurinburg to Gibson, N. C., a distance of ten or twelve miles, or some other point on the Atlantic Coast Line. Surveys are being made. Company not yet organized.

PACIFIC NORTHERN & OMINECA.—Company is going to the Legislature of British Columbia for amendments to its charter, giving the company power to construct and operate a line of railway from the junction of the Bulkley and Telkway Rivers and providing for the extension of certain time limits.

ST. LOUIS, KENNETT & SOUTHEASTERN.—An extension of seven miles from Webberville to Piggott, Ark., will be constructed and the company will convert to standard gage the present line from Kennett, Mo., to Webberville. The intermedfate stations will be West Kennett, Ark.; Nimmons and Webberville, Ark. R. H. Jones is Pres., Kennett, Mo.

SUPERIOR & WESTERN ONTARIO.—Application will be made to the Canadian Parliament for permission to incorporate this company, which intends to build a line of railway from a point on the Lake Superior branch of the Grand Trunk Pacific (National Transcontinental) about 154 miles northwest of Fort William, Ont., to a point on the same line north of Sturgeon Lake. McDougall & Honeywell, Ottawa, Ont., are Solicitors.

TENNESSEE NORTHEASTERN.—Surveys are being made for a standard-gage railroad from a point near Winchester Siding, Tenn., on the Queen & Crescent Route, through Scott, Fentress and Cumberland counties to a point on the Nashville, Chattanooga & St. Louis at or near Ravenscroft, Tenn., approximately 80 miles. The directors are: Pres., D. L. Fickes, of Scranton, Pa.; Vice-Pres., J. N. Graves, of Jermyn, Pa.; Secy., Ward R. Case, of Jamestown, Tenn.; Treas., Philo Chesebrough, of Scranton, Pa., and D. L. Potter, of Dalton, Pa.

TERRE HAUTE & SOUTHWESTERN.—Articles of incorporation have been filed with the Secretary of State for company with a capital stock of $50,000, to construct a railroad from Terre Haute to St. Louis, bearing south of the territory touched by the Vandalia and the C., C. C. & St. L. The incorporators are Terre Haute men with one exception, H. P. Taussig, of St. Louis. The additional incorporators are: H. C. Pugh, R. G. Watson, Robert Herkimer, S. C. McKeen, A. B. Bement and Charles Minshall. Work will begin in the spring.

TEXAS SHORT LINE.—Company proposes to extend to Quitman, Tex., and probably north through Hopkins or Franklin, Delta and Lamar counties to a point on the Red River, connecting with the survey of the St. Louis & Oklahoma Southern, in which the same controlling interests are concerned. An extension south, possibly to Waco, Tex., has also been considered. John B. Christensen, Commonwealth Trust Bldg., St. Louis, Mo.; the Commonwealth Trust Co., of that city; T. B. Meeks and J. A. Germany, of Grand Saline, Tex., are all interested. Address John D. Harkman, 2124 West Commerce St., care Station A, San Antonio, Tex. Noted on Dec. 3.

VANCOUVER, FRASER VALLEY & SOUTHERN.—Application is being made to Parliament for an act reviving the charter of this company granted in 1906. McPhillips, Tiffen & Laursen, Vancouver, B. C., are Attorneys for the company.

WILLIAMSVILLE, GREENVILLE & ST. LOUIS.—Company contemplates an extension from Cascade to Fredericktown. Survey has been made by W. McBrown, of East St. Louis, Ill. No bids have been received for construction. The extension will be 23 miles long and the work will be heavy. G. A. Long is Gen. Supt., Greenville, Mo.

ELECTRIC RAILWAYS.

LONG ISLAND CITY, N. Y.—Three petitions have been submitted to the Board of Estimate for franchises to operate trolley lines across the Queensboro Bridge and through Queens to the Nassau County line. The companies seeking franchises are the South Shore Traction Co., the Queensboro Bridge & Jamaica Ry. Co. and the Manhattan & Queensboro Ry. Co. The first mentioned company seeks to build and operate a road from Second Ave., Manhattan, across the bridge to the city line, passing through Jamaica and other important territory. It asks for a franchise for 25 years with the privilege of a renewal for an equal term upon a fair revaluation. The second company mentioned has laid out a route from the Manhattan terminal of the bridge, over the structure, to and along Jackson and Thompson Aves. and Hoffman Boulevard to Fulton St., Jamaica; also, lines to Corona and various parts of Flushing. It asks for the privilege of operating all of these lines through the Steinway or Belmont tunnel. The third company seeks to build and operate a road from Eleventh Ave. to 57th St., through 57th St. to Second Ave., across the bridge to Thompson Ave. and Van Dam St., Long Island City.

ADDISON, N. Y.—Application has been made to the Public Service Commission of the Second District by the Tuscarora Valley Traction Co. for permission to operate an electric railway between Addison, Woodhull and Jasper, a distance of 19 miles. E. C. Smith and W. E. Barron, Addison are interested in this project. Noted on Aug. 6.

JOHNSTOWN, PA.—It is announced that the Johnstown & Gallitzin Ry. Co., Suppes Bldg., Johnstown, will build an electric railway to connect Johnstown and Gallitzin and that the company will receive bids on material and labor for about 36 miles of single-track construction. There will be overhead construction, supported by wooden poles.

MEDIA, PA.—The Philadelphia & West Chester Traction Co. has presented a petition to the Media City Council asking for the passage of an ordinance granting them right-of-way over certain streets. It is the intention of the company, it is stated, to make Media the terminus of a line running from State St., across the townships of Nether Provudence, Marple, Springfield and Upper Darby, and make direct connections with the elevated road at 69th and Market Sts., Philadelphia. C. B. Fulton, Upper Darby, Pa., is Supt.

GREENSBORO, N. C.—We are officially advised that the North Carolina Public Service Company, capitalized at $3,500,000, headed W. N. Colar & Co., 43 Cedar St., New York, has bought the Greensboro Electric Company, with interurban rights-of-way.

SENECA, S. C.—A. W. Thompson, of Seneca, is projecting an electric railway between Walhalla and Seneca.

PENSACOLA, FLA.—The East Pensacola City Co. intends to construct its proposed street railway, not later than March 1. It will extend from Pensacola to East Pensacola, a distance of 1½ miles. Power will be rented from the Pensacola Electric Co. R. B. Simpson is Pres.; Knowles Hyer, Vice-Pres.; H. M. Yonge, Secy. and Treas.; J. E. Stillman, Mgr.

FORT PAYNE, ALA.—The Alabama Railway & Power Co., Fort Payne, will construct a traction line between Chattanooga and Birmingham. The company will furnish power for lighting. H. T. Henderson, Durango, Colo., is Pres.; J. H. Hill, Fort Payne, Ala., Vice-Pres.; C. L. Young, Jr., Durango, Colo., Secy. and Treas.

YOUNGSTOWN, OHIO.—Plans for a traction line from Conneaut, Ohio, on Lake Erie, to Smith's Ferry, on the Ohio River, are being considered by the Lake Erie & Youngstown R. R. Co. The company has procured franchises and the right-of-way for a line from Conneaut to this city, and it is stated that the work of continuing the right-of-way to the Ohio River will be started at once. The plan of the company is to operate cars driven by gasoline motors. The company is a $3,000,000 concern, of which John H. Ruhlman, of this city, is Pres. The extension from this city south, if built as now planned, will pass through Petersburg and East Palestine, Lawrence County; Enon Valley, Lawrence County, Pa., and thence by way of Darlington to Smith's Ferry, Beaver County, Pa. This city will be the central point of the road.

NEWCASTLE, IND.—The Newcastle Union Ry. has been formed to construct an electric railway connecting Newcastle, Sulphur Springs, Honey Creek and Middletown. A city line will be built in Newcastle, and at Middletown connection will be made with the Union Traction Co.'s lines. Capital stock, authorized, $50,000. Thomas B. Millikan, Pres.; Charles W. Mouch, Vice-Pres.; Albert D. Ogborn, Secy.

FRANKFORT, IND.—Construction will begin in the spring on the proposed line of the Kokomo, Frankfort & Terre Haute Traction Co., 207 South Main St., Frankfort. The following cities will be connected: Kokomo, Frankfort, Colfax, Crawfordsville, Rockville and Terre Haute. Oliver Gard, Frankfort, Pres.; J. C. Dewees, Kokomo, Vice-Pres.; E. B. Swift, Secy.; M. W. Eikenberry, Kokomo, Treas.

ADRIAN, MICH.—The line of the Toledo & Michigan Electric Ry. has been graded for a distance of 32 miles. A number of concrete culverts and bridge abutments have been built and 14 miles of fence have been put in place. The road has not yet been completely financed. It will be 60 miles in length, extending from Adrian through Clayton, Hudson, Pittsford, Osseo, Hillsdale, Jonesville, Quincy and Coldwater, all in Mich. The motive power will be electricity. The company expects to furnish power for lighting. Capital stock, authorized, $1,500,000. Bonds have been issued to the amount of $1,500,000. Peter P. Duket is Pres. and Gen. Mgr., Ohio Bldg., Toledo, Ohio; L. E. Goodrich, Hillsdale, Mich., Vice-Pres.; J. W. Hellem, Adrian, Secy.; Dr. C. H. Lards, Adrian, Treas.

WILLIAMSBURG, IOWA.—The Williamsburg & Iowa City Ry. Co. contemplates the construction of an electric railway, 28 miles in length to connect Williamsburg and Iowa City. Contracts have not yet been awarded. F. O. Harrington, Williamsburg, is Pres.; H. E. Hull, Williamsburg, Secy.

MAQUOKETA, IOWA.—An electric railway is to be built, 90 miles in length, to connect Davenport, Eldridge, Elwood, Grand Mound, Maquoketa, Andrew, La Motte and Dubuque, by the Davenport, Maquoketa & Dubuque Ry. The motive power will be electricity, and it is intended to install catenary construction. The power station and repair shops will be located in Maquoketa. Power for various purposes will be furnished to towns along the route. O. M. McCaffrey, Maquoketa, is interested.

AUSTIN, TEX.—A proposed amendment to the Constitution of Texas which has for its object the encouragement of interurban electric railway projects is pending in the Legislature. The resolution was introduced by Senator A. J. Harper. Its provisions give counties the right to vote taxes and issue bonds to build or aid in the building of interurban electric railways. It is claimed by Mr. Harper and other supporters of the amendment that if it is adopted it will result in inauguration of many enterprises of this character and it will mean the removal of an important obstacle in the way of the building of electric lines in this State. It is said that the construction of several such lines will be undertaken immediately upon the adoption of the proposed amendment.

FORT WORTH, TEX.—The Southern Traction Co. will build an interurban railway from Fort Worth via Everman, Burleson and Joshua to Cleburne, Tex. Preliminary surveys have been completed and location surveys will be made immediately. F. H. Peters, Pres., 28 Dundee Bldg., Fort Worth. S. B. Hovey, H. H. Cobb and T. Yarbrough, all of Fort Worth, are the Trustees. It is proposed to use high-speed gasoline motor cars. B. G. Leake is Ch. Engr.

SAN FRANCISCO, CAL.—Frank D. Stringham, representing the firm of Hillyer, Stringham & O'Brien, has filed an application with the Board of Supervisors for a franchise for a street railway system to begin at Stockton and Market Sts., and out Stockton St. to Sutter St., through a tunnel of four blocks from Sutter St. to Sacramento St., then to the surface again to the bay.

LEWISTON, IDAHO.—M. A. Means has made an application to the City Council for a franchise to construct a street railway in Lewiston. The franchise provides for the completion of over one mile of track within the next eight months and the completion of 3½ miles within 2½ years.

WELLANDPORT, ONT.—Plans have been made by the Dunnville, Wellandport & Beamsville Electric Ry. Co. to begin construction this spring. The road will extend from Dunnville through Wellandport to Beamsville, a distance of 23 miles. A by-law has been passed by Dunnville granting a bonus of $15,000. It is possible that the Board of Directors will be reorganized shortly. Capital stock, $400,000. The road will be bonded at $20,000 per mile. James A. Ross, Wellandport, is Pres.; W. J. Aikens, Dunnville, Secy.; R. T. Gough, Toronto, Ch. Engr.

TORONTO, ONT.—The Toronto, Niagara & Western Ry. Co. will make application to the Canadian Parliament for an extension of time to build lines between Toronto, Ont., and Niagara Falls, N. Y.; Toronto and Windsor and St. Catharines and Port Colborne, and for power to increase the bond issue. This proposed railway is one of those in which Mackenzie & Mann, Toronto, are interested. Plans for the proposed route were filed in May, 1907, and it was said recently that work was being done on the United States end of the route preparatory to the construction of a bridge across the Niagara River, on behalf of Mackenzie & Mann, in connection with this project. The line between Toronto and Niagara Falls will follow the route of the present power transmission line between these places.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

FALL RIVER, MASS.—The Fall River Electric Light Co. has applied to the City Council for permission to construct and maintain underground conduits on certain streets in the city. A. H. Kimball is Gen. Mgr., Fall River.

NEW YORK, N. Y.—Bids are asked until 3 p. m., Feb. 16, by John W. Brannan, Pres. Bd. Trustees, Bellevue and Allied Hospitals, for furnishing and setting lighting fixtures in Training School for Women Nurses of Bellevue and Allied Hospitals, situated on 26th and 25th Sts. and East River, Borough of Manhattan, the City of New York.

ALBANY, N. Y.—See item under Buildings.

ROCHESTER, N. Y.—We are officially advised that the CROCKER-WHEELER CO., of Ampere, N. J., has secured a contract to equip with motor drive the new wood working factory of the John Hofman Co., Rochester, N. Y. The order includes 40 induction motors ranging from 1 to 30 HP., with a total capacity of about 200 HP. These motors will be used for individual drive, each machine being equipped with its own motor. The motors, with the exception of one, are of the squirrel-cage type. The generator for this plant and three lighting transformers are also included in the contract.

BUFFALO, N. Y.—The bids received by the State Lunacy Commission on Feb. 3 for furnishing and installing engine and dynamo at the Buffalo State Hospital were: Fort Wayne Electric Works, Syracuse, N. Y., $6,245; E. G. Barnard Co., Troy, N. Y., $7,668; Sackett Electric Construction Co., Buffalo, N. Y., $6,179; alternate bids: Ridgeway engine, $5,978; Skinner engine, $6,125; Ames engine, $6,200; John W. Danforth Co., Buffalo, N. Y., $5,795; Buffalo Electric Contracting Co., Buffalo, N. Y., $5,500; Ridgeway engine, $5,640; J. C. Stearns Electric Co., Buffalo, N. Y., $5,300; the G. & W. Mfg. Co., New York, $6,300; Wheeler-Green Electric Co., Buffalo, N. Y., $6,100; Engineering Service Co., New York, $5,847; McCarthy Bros. & Ford Co., Buffalo, N. Y., $5,750; Frost & Sheldon, Albany, N. Y., $7,100; John P. Kelley, Schenectady, N. Y., $5,850. T. E. McGarr is Secy.; F. B. Ware is State Arch., both at Albany.

WARREN, MD.—We are officially advised that Mr. F. W. Dean, 53 State St., Mill Engr. and Arch., Boston, Mass., is acting for the city of Baltimore, Md., in the matter of valuation of plant and property of the Warren Mfg. Co., Warren, Md., in which are concerned some interesting questions as to the value of an old water power with supplementary steam power as compared with that of a modern steam plant for the development of all power.

FRIENDSVILLE, MD.—The plans of the Youghiogheny Power Co., chartered by the Circuit Court for Garrett County to develop power on the Youghiogheny River, include erection of three dams, 30, 75 and 100 ft. high, respectively, which will accumulate enough water for turbines to develop 15,000 HP. The estimated cost of the plant is $1,000,000. The Western Maryland Coal & Coke Co. is interested in the enterprise and the plant will be located near Friendsville. Arrangements for building the plant will be given consideration soon. The Western Maryland Coal & Coke Co. owns property on both sides of the river. Clifford L. Pullen, of New York, is Gen. Mgr. of the company and William A. Morgart, of Cumberland, Md., is interested in the project.

FREDERICKSBURG, VA.—The Electric Generating Co., incorporated with $100,000 capital stock, has the following officers: E. J. Smith, Pres.; Isaac Hirsh, Vice-Pres.; Alvin T. Embrey, Secy.-Treas. The company will build a plant to include 1,300-KW. rotary field and stationary armature, direct connected by horizontal turbine waterwheel; two 38-KW. direct-current exciters direct connected with flexible couplings; 25-ton, 3-motor traveling cranes; building to be 42 × 60 ft. The plant is to cost $150,000. R. M. Vandorn, Exchange Hotel, Fredericksburg, is Engr-in-Charge.

PARKERSBURG, W. VA.—The Parkersburg, Marietta & Interurban Ry. Co., of Parkersburg, W. Va., will build a power plant between Parkersburg and Marietta on the Ohio side of the Ohio River. C. H. Shattuck, Parkersburg, is Gen. Mgr.

SAMSON, ALA.—Howard Butt, 121 Sayre St., Montgomery, Ala., has been appointed Engr. to take charge of the construction of the proposed electric light plant and waterworks system. W. J. Gresham, Mayor, wishes to correspond with a bonding company for the purchase of $25,000 in bonds, the proceeds to be used for the construction of the above plants. Mr. Butt desires to communicate with manufacturers of machinery and equipment.

DOTHIAN, ALA.—The Morris Lumber Co. has purchased a controlling interest in the Choctawhatchee River Light & Power Co. Work will be commenced soon on the construction of the dam which will develop about 4,000 HP. The officers of the company are: A. C. Ackley, Pres.; G. S. Kelley, Vice-Pres. and Gen. Mgr., and A. L. Kelly, Secy. and Treas. The present postoffice address is Slocomb, Ala.

PINEVILLE, KY.—The City Council has prepared an ordinance and will call for bids soon for a 30-year franchise to construct an electric light and power plant, with an output of at least 180 KW., the equipment to include two or more generators direct-connected, both to have a rating of not less than 80 KW. B. H. Broughton is City Clerk.

PHILO, OHIO.—The contract for construction of the power plant of the Center Valley Light & Power Co. on the site of the William Frazier mill at Philo has been let to A. W. McDONALD, of Steubenville, Ohio. The cost is $260,000. Work will be begun at once and will be in charge of F. W. Wetherall, Engr. Two buildings will be erected, according to the plans of the company. One of these buildings will be 100 × 100 ft. and will be the main generating plant. Another building, to be used as an auxiliary will be 100 × 75 ft. These plants will be so equipped that 2,800 HP. may be developed. Four double turbines will be installed and the motive power will be steam and water. The water power will be secured from the old mill race. It is purposed to furnish electric light to the villages of Philo and Duncan Falls.

CINCINNATI, OHIO.—Bids are asked by the Board of Public Service until noon, Feb. 18, for furnishing the necessary labor and materials for the improvement of Eden Park tower, by rewiring and furnishing all necessary sockets, bushings, wire, conduits, cut-outs, switches. etc. John J. Wenner is Clerk.

SHOALS, IND.—We are officially advised that the Town Council has granted a franchise for an electric light plant to James F. Lynch, of Danville, Ind. The motive power will be steam. The system is to be completed by Oct. 1. Noted on Jan. 14.

IRONWOOD, MICH.—The Twin City General Electric Co. is planning to place contracts for material for the construction of a 7-mile extension from Ironwood to Bessemer, Mich. The company is making plans to repair its transmission lines and install new machinery in its plant, and will place a contract within the next 30 days for one 150-KW. 2,300-volt, 3-phase generator; also one 200-HP. alternating-current motor connected to direct-current generator. G. Beck, Ironwood, is Supt.

IRON MOUNTAIN, MICH.—The Iron Mountain Electric Light & Power Co. has purchased the water rights of Lower Twin Falls, on the Michigan side of the Menominee River for a consideration of $15,000. The company will commence work at once on development of the water power, which, when completed, will supersede the present steam plant. It is proposed to develop about 500 HP. The steam plant will be held in reserve for use in emergencies. George Irving, Iron Mountain, is Mgr.

PEORIA, ILL.—A change of the power system from alternating to direct current on the interurban line from Bloomington to Peoria and from Mackinaw to Springfield is to be made and will cost about $200,000. Contracts for equipment and material have been let to the GENERAL ELECTRIC CO., of Schenectady, N. Y., and probably are all signed by this time. To make this change new and heavier copper wire will have to be used the entire distance, about 100 miles. The cost of this wire is $101,000. The Illinois Traction System will furnish the labor to install the new work. H. E. Chubbuck, Gen. Mgr., plans to have this change made by the first of July. Eight sub-stations will be set up. The equipments now on twenty cars will have to be changed. The General Electric Co. will take the old machinery. It will also furnish new car equipments.

DANVILLE, ILL.—Frank Payne, Engr., has made a survey of a site on the Vermillion River, where it is proposed to develop power.

OCONOMOWOC, WIS.—Plans are being made to improve and enlarge the municipal electric light plant, the cost of which is estimated at $13,000. F. R. Hubbard is Engr.-in-Charge.

CEDAR RAPIDS, IOWA.—Engineers have completed a survey for a dam across the Cedar River at Cedar Bluffs, in Cedar County. The Cedar Rapids & Iowa City Ry. and Light Co. has selected a site for a dam near the Palisades, a point closer to both Iowa City and Cedar Rapids. It is planned to build a dam at this point for the development of power, the two cities, and it is probable that a dam will be constructed at Cedar Bluffs. W. G. Davis is Gen. Mgr., Cedar Rapids.

TURON, KAN.—Charles [illegible] urray, of Turon, Kan., contemplates [illegible] ling an electric light plant in Turon [illegible] ing the summer and desires to commu[illegible] with manufacturers for equipment a[illegible] achinery for the plant.

TOPEKA, KAN.—Estimat[illegible] e being made for the cost of equipping [illegible] Atchison, Topeka & Santa Fe Ry. with [illegible] trical power from Trinidad to Raton, [illegible] stance of 30 miles. Electricity for oper[illegible] the system will be available upon the [illegible] tion of the power plant of the Southern [illegible] rado Power Co. in Trinidad. The cost [illegible] the work is estimated at not less than $[illegible] 000. C. A. Morse, Topeka, is Ch. Engr.

MISSOULA, MONT.—Plans [illegible] being considered by the Idaho Water [illegible] tric Power Co., lately organized with [illegible] capital of $500,000, for the construction [illegible] seven dams during the next two years [illegible] ven Hoyt's Flat and the town of St. [illegible] in the St. Joe River. The dams when [illegible] pleted will furnish power to generate el[illegible] city to operate trains through the mo[illegible] n country. Plans and estimates have [illegible] completed and active work will commence [illegible] as soon as the weather will permit. The [illegible] tal cost of the dams is estimated at from $300,000 to $400,000.

ST. LOUIS, MO.—The Sunlight Street Lighting Co., of Pittsburg, Pa., submitted the lowest of the bids received on Feb. 5 for the 10-year contract, beginning Dec. 1, 1910, for lighting the residence district with gas incandescent lamps. Its bid was $5.50 for 1,000 mantle lamp hours. This will make the total for the ten years $4,961,000. The Welsbach Street Lighting Co., which holds the present contract, was the next lowest bidder with an offer to furnish the light at $5.62 for 1,000 lamp hours, which would make the total cost for the ten years $4,968,162. The American Street Lighting Co., of Baltimore, submitted a bid of $6.50.

RUSSELLVILLE, ARK.—Russellville Water & Light Co., A. Brewster, Pine Bluff, Ark., Pres., will establish a plant to furnish Russellville with light and water and cities within radius of 50 miles with light. The company has taken over franchise of Russellville & Ozark Mountain Light & Transit Co. A light plant built by original company will be equipped with additional machinery, including one 150-KW. generator, to be used in conjunction with a 100-KW. machine now in service. It is stated that FRED WILSON, Pine Bluff, Ark., has contract for ocnstruction of power-house and dam on Illinois River near Russellville, where there is a fall of 22 ft. The dam, when completed, will be 400 ft. wide, with a 25-ft. head of water. Four turbine wheels will develop about 500 HP.. A reservoir will be built on top of a 168-ft. hill from base of dam, and water will be pumped into the reservoir from the river below. It is estimated that $50,000 will be cost of dam, race, power house and reservoir. Contracts for equipment of waterworks system will be let during coming spring and summer.

TERRELL, TEX.—Bids will be received by the city until Feb. 15 for erection of an electric-light plant. Frame buildings of ordinary construction, 48 × 92 ft., will be erected at a cost of $2,000. Steam and electric machinery to cost $15,000 is to be installed. W. C. Drake is Engr.-in-Charge. E. R. Miller is City Clerk.

HOBART, OKLA.—Hobart Water-Power Co., recently incorporated, will build a water power plant to distribute 7,500 HP. by electricity for operation of the proposed Hobart Interurban Railway (300 miles) and for lighting and power in cities on railway's route. Engineering work is in progress and will be completed in 90 days. Construction to begin by April 15. C. T. Blake, Pres.; H. H. Hoover, Vice-Pres.; R. E. Nye, Secy.; J. H. Montgomery, Treas.; offices at 207 East Fourth St. The Hobart Water-Power Co. is a subsidiary to the railway company.

TACOMA, WASH.—The City Council has appointed Frank C. Kelsey, of Portland, Ore., as special engineer to superintend the construction of the hydro-electric plant on the upper Nisqually River. The cost of the plant is estimated at $1,750,000.

OAKLAND, CAL.—Articles of incorporation of the Central Oakland Light & Power Co., capitalized at $1,250,000 have been filed in San Francisco with the County Clerk. The company, according to the petition, has been formed to develop and install plants for the distribution of electric current, and water and steam for light, heat and power for domestic and mechanical uses, and to supply electricity, water, steam, light and power for Oakland and other cities. Directors are: A. M. Hunt, James Fisher, Berkeley; J. K. Moffitt, Oakland; M. S. Wilson, M. D. Levenson, F. G. Cartwright, C. N. Beal, San Francisco. The principal place of business of the company is to be San Francisco.

A permit has been applied for at the Board of Public Works for the construction of the distributing plant of the Great Western Power Co., Crocker Bldg., San Francisco, Cal., and 25 Broad St., New York, at the foot of Sixth Ave. on Sessions Basin of the estuary. The building will cost $50,000, the plans calling for a reinforced concrete fireproof structure. The construction work will be done by the GLOBE CONSTRUCTION CO., Chronicle Bldg., San Francisco.

CAMPBELLFORD, ONT.—Smith, Kerry & Chace, Confederation Life Bldg., Toronto, Ont., advise us that the Seymour Power & Electric Co., Ltd., for which they are acting as Engrs., is placing contracts for the construction of a power-house at Campbellford, Ont. The power-house, when complete, will develop 4,000 HP., and contracts for the more important machinery have already been made with the CANADIAN WESTING-

HOUSE MFG. CO., the CANADIAN GENERAL ELECTRIC CO., WILLIAM KENNEDY & SONS and the GENERAL ELECTRIC CO.

GUANAJUATO, MEXICO.—The Guanajuato Light & Power Co. has decided to erect a hydro-electric plant at El Duro, which will have an output of 9,000 HP. The plant, when completed, will give the company a total output of 20,000 HP. The company has recently completed a new double transmission line to points in the Guanajuato territory. Norman Rowe is Gen. Mgr.

SANTA ROSALIA, MEXICO.—The Compania Agricola y de Fuerza Electrica del Rio Conchos has been organized with a capital stock of $10,000,000, to construct a large hydro-electric plant and transmission system in the State of Chihuahua, Mexico, it is stated. It is planned to construct a dam across the Conchos River near the town of Santa Rosalia, State of Chihuahua. Transmission lines will be erected to the cities of Chihuahua and Parral and to various mining camps, and to industrial centers within a radius of 175 miles. The plans of the company also call for the irrigating of about 100,000 acres of land which will be reclaimed from the valley of the Conchos River. The pumps will be operated by electricity. Paul Ginther is Pres.

MEXICO CITY, MEXICO.—The Mexican Light & Power Co. is preparing to increase its plant from 50,000 to 124,000 HP., and to accomplish this will construct about 20 miles of canals and tunnels to bring water into use from rivers now untouched.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

SYRACUSE, N. Y.—The city proposes to construct a bridge over Onondaga Creek at Tallman St. Estimated cost, about $14,000. Henry Caller is City Engr.

NEW YORK, N. Y.—Bids were received on Feb. 4 by J. W. Stevenson, Comr. of Bridges, for furnishing and delivering lumber to the Williamsburg (new East River) bridge: Yellow Pine Co., 16 Beaver St., $9,049; A. J. Jacobson & Son, $9,970; John C. Orr, $9,228; Louis Boisett, $9,076; Brooklyn Lumber Co., Hamilton Ave., Brooklyn, $9,113; Cross, Austin & Ireland Lumber Co., $10,652; Watson & Pittinger, 420 Carroll St., Brooklyn, $9,480.

MONONGAHELA, PA.—The contract for construction of the bridge across the Monongahela River here was let on Feb. 8 at a joint meeting of the Commissioners of Allegheny and Washington Counties to the FORT PITT BRIDGE CO., at $262,267. Each county is to bear half of the expense.

DUNGANNON, VA.—Bids will be received until noon, Feb. 12, by State Highway Commissioner Richmond P. St. John Wilson, Comr., for constructing a bridge across the Clinch River at Dungannon.

CHARLOTTESVILLE, VA.—A highway bridge, 125-ft. span, 20-ft. truss, will be constructed here. S. P. Maury is Engr.

MADISON, VA.—We are officially advised that the ROANOKE BRIDGE CO., Roanoke, Va., has been awarded the contract at $4,217 for a steel bridge across Robinson River near here by the State Highway Commission. Bids were opened on Jan. 22.

BUCKEYE, W. VA.—We are officially advised that the following bids were received by the County Court of Pocahontas County on Feb. 2 for a highway bridge over Greenbrier River at Buckeye: (a) superstructure, (b) concrete masonry, (c) stone masonry: Canton Bridge Co., (a) $3,803; (b) $10. Brackett Bridge Co., (a) $4,462; (b) $6; (c) $9. York Bridge Co., (a) $3,260; (b) $9; (c) $8. Nelson-Merydith Co., (a) $3,664; (c) $9. Roanoke Bridge Co., (a) $3,900. FARRIS BRIDGE CO., lump sum for all, $7,952 (awarded contract).

*BEAUFORT, N. C.—We are officially advised that bids were received as follows on Jan. 30 by Capt. Earl I. Brown, Corps Engrs., U. S. A., Wilmington, for constructing a steel draw-span highway bridge with pile and concrete foundations on Core Creek, near Beaufort: New Jersey Foundry & Machine Co., New York, N. Y., $19,487, through truss swing; Grant Wilkins, Atlanta, Ga., $22,784, through truss swing; Merrell-Ruckgaber-Fraser Co., New York, N. Y., $19,650, plate girder swing, 26-in. depth; $20,940, same type 27-in. depth; $19,050, pony truss swing; Schwiers & Sutton Co., New York, N. Y., $20,862, pony truss swing; G. & W. Mfg. Co., New York, N. Y., $16,347, through truss swing; Crafts & Smith, Dublin, Ga., $18,901, through truss swing; $21,491, Strauss trunnion bascule lift plate girder type; Penn Bridge Co., Norfolk, Va., $18,690, pony truss swing; $20,680, plate girder swing; $20,341, Scherzer rolling lift, single leaf; $21,760, same type, double leaf; Southern Construction Co., Burlington, N. C., $20,487, bascule lift, single leaf, Strauss; Nelson-Merydith Co., Chambersburg, Pa., $21,096, through truss swing; $25,095, bascule lift single leaf, Strauss; $20,817, plate girder swing; $21,180, pony truss swing; Roanoke Bridge Co., Rock Hill, S. C., $18,876, through truss swing; Owego Bridge Co., Greensboro, N. C., $20,261, through truss swing. The G. & W. Mfg. Co., 26 Cortlandt St., has been recommended for award.

PENSACOLA, FLA.—The City Council is considering the construction of viaduct at Gadsden and Tarragona Sts. Estimated cost, $16,500.

KNOXVILLE, TENN.—The CONVERSE BRIDGE CO., Chattanooga, Tenn., has secured the contract for two steel bridges for the county, one at Minot, and one at Wellsville.

MEMPHIS, TENN.—The Legislative Council has approved the proposed $1,000,000 bond issue for bridge, sewer and street purposes.

CALHOUN, TENN.—R. J. M. Only, Attorney and Archt., Calhoun, is preparing plans, specifications and estimates for a bridge over the Hiawassee River. Estimated cost, between $25,000 and $30,000. Bids for construction will be received about March 15.

MARYVILLE, TENN.—The Blount County Commissioners have awarded the contract to the CONVERSE BRIDGE CO., Chattanooga, Tenn., for constructing two steel bridges across Nine Mile Creek. Clay Cunningham is Clk. Comrs.

BOWLING GREEN, KY.—The ARGONIA BRIDGE CO., Lebanon, Ohio, has secured the contract at about $4,000, for constructing the new bridge at Mottley's Mills for the Warren Fiscal Court.

COSHOCTON, OHIO.—Bids will be received until March 5 by the Board of County Commissioners for $325,000 of bridge bonds. George Bock is County Surv.

BARBERTON, OHIO.—The Village Council on Jan. 25 approved and adopted the plans of the Village Engineer for the construction of the Cornell St. viaduct.

TOLEDO, OHIO.—The TOLEDO-MASSILLON BRIDGE CO., of Toledo, was awarded the contract on Feb. 4 for the repairing and strengthening of the present Cherry St. bridge, at $3,100. This was the low bid of four. It does not include the putting in of a new span. Other bidders were: Motier & Confer, $3,395; Capitol Construction Co., $4,000; Wynkoop & M'Gormley, $3,550.

GARY, IND.—The Board of Commissioners of Lake County, Crown Point, Ind., awarded the contract on Feb. 1 to E. H. CROWELL, Crown Point, at $36,400, for the construction of a bridge over the Calumet River, at Broadway. W. F. Bridge is Engr., Hammond, Ind.

LANSING, MICH.—Bids will soon be asked by the Board of Public Works for the construction of a 134-ft. span steel or reinforced concrete bridge over Cedar River. Estimated cost, $40,000. H. C. Collar is City Engr.

MOLINE, ILL.—The Committee on Commerce of the Senate has made a favorable report on Senator Cullom's bill to authorize the construction of two bridges across Rock River between Henry and Rock Island Counties. The resolution adopted by the Board of Supervisors of Henry County ordering the erection of two bridges across Rock River provides that the work shall proceed when Rock Island County is able to bear its share of the expense. One of the bridges is to be erected at Fones' Camp and the other at Colona.

HANOVER, ILL.—Bids are asked until 5 p. m., Feb. 20, by the Bridge Commissioner for the construction of the foundations and superstructure of a bridge over Dew Creek here.

CEDAR RAPIDS, IOWA.—Bids were opened on Jan. 28 by L. J. Storey, City Clk., for the construction of the new bridge across Indian Creek at 30th St., as follows: Bartlett & Kling, Cedar Rapids, $7,400; Toledo Bridge Co., $6,250; Union Engineering Co., $7,925; F. J. Miller, $5,788; CLINTON BRIDGE CO., Clinton, Iowa, $4,262; Cook Construction Co., $8,717; Cedar Construction Co., $5,970; Pan-American Bridge Co., $5,140; Midland Bridge Co., $5,650.

CENTRAL CITY, NEB.—The Merrick County and Polk County Commissioners propose to construct a bridge over the Platte River, about two miles east of Clarks Village. Estimated cost, $12,000.

FAULKTON, S. DAK.—Bids are asked until March 2, by W. H. Race, County Audr., for one steel bridge 70 ft. long across the Nixon River and one steel bridge 100 ft. long across same river.

HEARNE, TEX.—The city is considering construction of a wagon bridge over the Brazos River. Estimated cost, $16,000. P. L. Brady is Mayor.

DALLAS, TEX.—A. S. ADAMS has been awarded the contract by the city for constructing a concrete bridge over Turtle Creek at Hall St.

TULSA, OKLA.—Bids will be received by the Board of Commissioners of Tulsa County, until Feb. 24 for the construction of 13 bridges. W. L. North is Chn. Bd.

CARLSBAD, N. MEX.—We are officially advised that surveys and soundings for foundations are being made for steel bridges at Artesia and Malaga, N. Mex., and also for a reinforced concrete bridge across the Pecos River at Carlsbad, N. Mex. Contracts will be advertised for within 30 days.

BELLINGHAM, WASH.—The Council has passed an ordinance providing for a bridge across Whatcom Creek between Grand Ave. and B St. Bids will be asked soon. Estimated cost, $4,000. H. W. Troutman is City Engr.

KENNEWICK, WASH.—The North Coast Ry. Co. has awarded the contract to the PUGET SOUND BRIDGE & DREDGING CO., Seattle, Wash., for the construction of a steel and masonry bridge over the Columbia River near here. Estimated cost, $1,000,000.

SOUTH PASADENA, CAL.—The construction of a bridge over the Arroyo Seco, between South Pasadena and Garvanza is contemplated. The structure is to be 950 ft. long. Estimated cost, about $80,000. R. W. Pridham, of Los Angeles, is County Superv.

NAMPA, IDAHO.—J. H. FORBES & CO., Caldwell, Idaho, have been awarded the contract by the city for constructing a bridge over Indian Creek on South Eleventh St.

ST. MARIES, IDAHO.—Plans for the new bridge across the St. Joe River at this place have been completed and approved. The structure will be of steel. Estimated cost, from $18,000 to $20,000.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

FORT McKINLEY, ME.—Kennedy & Peterson, 18 Cambria St., Boston, Mass., were the lowest bidders for constructing double barracks and N. C. O. quarters at Fort McKinley, at $80,449, and Smith & Rumery, Portland, for constructing four buildings at Fort McKinley, at $59,903.

SPRINGFIELD, MASS.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office building at Springfield, Mass., to M. P. WELLS, Witherspoon Bldg., Philadelphia, at $61,985. Time, Jan. 31, 1909. A complete list of bids was given on Jan. 14.

WALPOLE, MASS.—We are officially advised that F. W. Bird & Son, Walpole, Mass., will build a storehouse in accordance with plans by Charles T. Main, Arch., 45 Milk St., Boston, Mass. The foundations will be put in by the owners; the superstructure will probably be built by contract.

WEST POINT, N. Y.—Bids are asked until noon, Feb. 24, by Maj. J. M. Carson, Q. M., U. S. Military Academy, West Point, for constructing a 2-story riding hall, 159 × 589 ft. Cram, Goodhue & Ferguson, 170 Fifth Ave., New York, are Archs.

NEW YORK, N. Y.—We are officially informed that estimates are being received for constructing a brick tenement, 99.11 × 90 × 87 ft., at the corner of 150th St. and Edgecombe Ave. The building will be owned by Emanuel Doctor, 207 West 133d St., and will cost $140,000. John Hauser, 360 W. 125th St., is Arch.

A 5-story flathouse will be erected for John J. White at the corner of St. Nicholas Ave. and 185th St., to cost $80,000, and two 5-story flathouses for the Pinehurst Realty Co. in 180th St., west of Audubon Ave., to cost $100,000. G. F. Pelham, 503 Fifth Ave., is Archt. for each operation.

It is announced that Charles E. Rector has obtained a lease for 60 years on the property at 44th St. and Broadway, now occupied by the Schloss Cafe and offices and adjoining his present restaurant building. He will begin the erection in May of a 12-story hotel, which will occupy both sites. The building which he has now will be torn down to make way for the new structure. It is said that the hotel will have accommodations for about 300 guests.

Plans have been filed for a 6-story apartment house, to be built for the Garnet Hall Realty Co., 231 Broadway, at the corner of Broadway and 141st St. The building is to have a frontage of 99.11 ft. and a depth of 90 ft., and is to cost $115,000. Sommerfeld & Steckler, 19 Union Sq., are Archs.

Neville & Bagge, Archs., 217 West 125th St., advise us that E. M. Krukwitch, 695 St. Nicholas Ave., is taking estimates for construction of a 6-story brick apartment house, 100 × 90 ft., to cost $200,000, and to be erected at St. Nicholas Ave. and 180th St.

NEW YORK, N. Y.—We are officially advised that estimates will be taken and contracts let in about six weeks, by Henri Fouchaux, Arch., 105 Hudson St., for a 6-story brick and stone apartment house, 216.10 × 98 ft., to cost $275,000. The structure will be owned by the Central Building Improvement & Investment Co., Hymann Sonn, Pres.; Henry Sonn., Secy-Treas., 149 Church St. The building will be erected at Convent Ave. and 130th St.

Two 5-story residences will be built for W. W. & T. M. Hall, 11 East 42d St., owners, on West 86th St., west of Central Park. The buildings are to be of colonial design, of brick, with limestone trimmings, and will have a frontage of 25 ft. and a depth of 64 ft., and equipped with elevator service. They are to cost $50,000 each. Plans for them were filed to-day. A. M. Welch, 11 East 42d St., is Arch.

The Convent of Jesus and Mary will build a 6-story building at 222 and 224 West 15th St. The convent is connected with the Roman Catholic Church of Our Lady of Guadalupe, at 229 West 14th St., of which the Rev. Thomas Darbois is head, and which has a convent building adjoining it. The new building is to be of brick and limestone, in the style of the French Renaissance, and will contain a chapel on the main floor. It is to cost $50,000.

Plans have been filed for two 6-story apartment houses to be built for Jacob Hirsch, 47 Cedar St., owner, on the Broadway block from 152d to 153d St. They will have a frontage of 99.11 ft. and a depth of 115 ft. each. Each house will contain 45 suites of apartments. The houses will be of brick, trimmed with limestone and terra cotta, from designs by Schwartz & Gross, 347 Fifth Ave., and B. N. Marcus. They will cost $450,000.

NEW YORK, N. Y.—We are advised by James Riely Gordon, Arch., 402 Fifth Ave., that the general contract to construct an 11-story, $900,000 loft building, 225 × 77 ft., at the corner of Irving Pl. and 16th St., has been let to IRONS & TAPPEN, Monmouth Ave., Lakewood, N. J. The structure will be built of brick and stone by the Irving Corner Co., 320 Fifth Ave. The building is to be of Italian Renaissance design and will have facades of brick, trimmed with granite and limestone and terra cotta, and finished at the top two stories with a loggia, with Doric colonnades supporting a balustrade and cornice, and having large entrance porticos, with Doric pillars.

Schwartz & Gross, Archs., 347 Fifth Ave., have filed plans for two 6-story apartment houses, 25 × 86.11 ft., to be built for the Waunegan Realty Co., 35 Nassau St., in 163d St., west of Broadway. They will have 25 suites each, and are to cost $170,000.

Plans have been filed for a 2-story store building, with offices on the second floor, to be built at a cost of $40,000 for G. L. Lawrence at St. Nicholas Ave. and 181st St., fronting 119.7 on the avenue and 225 ft. on the street. George F. Pelham, 503 Fifth Ave., is Arch.

FORT SLOCUM (New Rochelle post-office), N. Y.—The following awards have been made for the construction and completion of buildings at Fort Slocum, N. Y.: One 4-set officers' quarters, CHARLES E. CURRIER CO., Boston Mass., construction, $42,989; DAVID BUIST, Bernardsville, N. J., plumbing, $2,140; EARL & COOK, New York City, heating, $1,697; G. H. & E. E. LOWELL, Portland, Me., wiring, $787; fixtures, $549. One double set lieutenants' quarters, JACOB FELS, Brooklyn, N. Y., construction, $18,040; DAVID BUIST, plumbing, $1,659; EARL & COOK, heating, $1,213; G. H. & E. E. LOWELL, wiring, $728; fixtures, $345. Two double N. C. O. quarters, CHARLES E. CURRIER CO., construction, $13,288; DAVID BUIST, plumbing, $1,480; J. L. MOTT IRON WORKS, New York, heating, $748; G. H. & E. E. LOWELL, wiring, $428; fixtures, $201. CHARLES E. CURRIER CO. was also successful for the construction of a crematory building, for which the machinery will be furnished by LOUIS KITCHEN.

ROCHESTER, N. Y.—Bids are asked by Charles E. Shafer, Chn. Comrs. of Public Buildings, at office of purchasing agent, Court-house, until 11 a. m., Feb. 24, for constructing an addition or annex to the Monroe County Jail. Crandall & Stobel, Ellwanger & Barry Bldg., are Archs.

ALBANY, N. Y.—Bids are asked by the State Lunacy Commission until 3 p. m., noon of Feb. 24, on the following work: (1) For tuberculosis building, including construction, heating, plumbing and electric work at the Buffalo State Hospital, Buffalo, N. Y.; (2) for dormitory at Inwood, including construction, heating, plumbing and electric work at the St. Lawrence State Hospital, Ogdensburg, N. Y.; (3) for sewerage and sewage disposal works; and alterations to plumbing, Wards 41, 42, 43, 44, 47, 48 and 49, including plumbing and construction at the Kings Park State Hospital, Kings Park, N. Y.; (4) for sewer and ejector at the Rochester State Hospital, Rochester, N. Y. And until 3 p. m. on March 3 for Hospital for Acute Insane, including heating, plumbing, construction and electric work; conduits for Nurses' Home and Farmer's House, construction, including steam piping and electric cables; day-room annexes, construction, including heating and electric work; pavilion for contagious diseases, construction; for the Middletown State Hospital, Middletown, N. Y. T. E. McGarr is Secy.; F. B. Ware is State Arch., Albany.

ELIZABETH, N. J.—Bids are asked by James Knox Taylor ,Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., March 9, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Elizabeth, N. J.

HOBOKEN, N. J.—The First National Bank has had plans prepared by Kenneth M. Murchison, Jr., 320 Fifth Ave., New York, for a 2-story bank building, 50 × 75 ft., to cost $125,000.

JERSEY CITY, N. J.—The following bids have been received by the Board of Education for erection of No. 33 Public School on Clendenny Ave.:

Mason work—Calumet Construction Co., $53,421; Paul J. Exner General Building & Construction Co., $56,687; Charles Keuderly, $57,900; William Robertson & Son, $58,932; M. T. Connolly Contracting Co., $58,972; Gavin & Doris, $59,900; William J. Moran (Inc.), $65,689; John H. Parker Co., $72,188.

Carpenter work—Paul J. Exner General Building & Construction Co., $13,058; William J. Moran, Inc., $14,520; Robert W. Eichmann, $14,689; John Hansen, $14,990; Robert Cook, $15,300; A. J. Dittmar & Son, $15,350; Joseph Jewkes & Sons Co., $15,656; John H. Parker Co., $19,137.

Mason and Carpenter Work—John J. O'Leary Co., $73,657.

Painting Work—Martin A. H. Miller, $1,698; Andrew Lemon, $1,735; William J. Moran, Inc., $1,850; Paul J. Exner General Building & Construction Co., $1,900; Jacob I. Haas, $2,160; John H. Parker Co., $2,500.

Plumbing and Gasfitting Work—Paul J. Exner General Building & Construction Co., $4,800; Worden & Crawford Co., $5,075; William J. Moran, Inc., $5,200; E. H. Moore & Bro., $5,500; John J. Hess, $5,645; Fergus T. Kelaher, $5,760; John H. Parker Co., $7,000; J. H. Pentland & Co., $7,867.

Heating Work—Walter A. Cross, $10,247; Storms & Co., $10,949; York Engineering Co., $10,975; John T. McLaughlin, $11,477; Baldwin Engineering Co., $11,196; Paul J. Exner General Building & Construction Co., $12,000; E. Reutzler Co., $12,049; William J. Moran, Inc., $14,000; John J. Hess, $14,938; John H. Parker Co., $18,298.

Electrical Work—William J. Moran, Inc., $1,290; Eugene Frank, $1,375; Jersey City Electric Co., $1,490; Paul J. Exner General Building & Construction Co., $1,500; The Browe Co., $1,892; Watson-Flagg Engineering Co., $1,933; Louis Fort, $1,980; John H. Parker Co., $2,250.

Entire Work—Calumet Construction Co., $86,619; Charles H. Peckworth, $88,854; Dennis Mullins, Inc., $89,700; Paul J. Exner General Building Construction Co., $89,945; Joseph Jewkes & Sons Co., $92,358; W. H. & F. W. Cane, Inc., $93,717; M. T. Connolly Contracting Co., $95,459; William J. Moran, Inc., $102,549; John H. Parker Co., $109,979.

PHILADELPHIA, PA.—The contract for the erection of an addition to the clubhouse of the Union League was awarded last night to JAMES G. DOAK & CO., 1420 Chestnut St., at $527,600. The new building will be an extension of the present structure, carrying it back to 15th St. It will be four stories high and of the same general style of architecture and character of construction as the present building. The two upper floors will be taken up entirely with sleeping-rooms and bath-rooms. An extension of the billiard room and restaurant facilities will occupy the first and second floors, while the basement will probably be fitted up with baths of various kinds. Work will be started in a short time.

Plans for a Gothic style stone church, to be built at 20th and Parish Sts., are in

preparation in the office of Naschad & Kuntzen, Archs., Drexel Bldg. Estimates on construction will be invited as soon as the working drawings can be finished.

Plans are in preparation by Ballinger & Perrot, Archs., 1200 Chestnut St., for a 7-story brick and reinforced-concrete apartment house, 87 x 135 ft., to be built by a syndicate at the corner of Wayne and Chelten Aves. It will be known as the Whitehall Apartments.

The Board of Education is having plans prepared for an 18-division school to be known as the Marshall School, and to be built at Franklin and Sellers Sts., Frankford. It will be of brick and stone and will cost about $150,000.

MONONGAHELA, PA.—Bids are asked until 8 p. m., Feb. 17, by the School Board for construction of a 2-story school building for the Third Ward. Frank Keller is Arch. Cost, about $50,000.

WILMINGTON, DEL.—The Hanover Market Co. has been formed for the purpose of erecting a market house on Sixth and King Sts., to cost $70,000.

BALTIMORE, MD.—Bids are asked until noon, Feb. 18, by Wyatt & Nolting, Archs., Keyser Bldg., Baltimore, for erection of an administration building and two or three cottages on the site of the school near Loch Raven, Baltimore County. The administration building will be in the center and will be T-shaped. It will be of Colonial design, with massive marble columns and wide hallway. The first floor will contain the large auditorium, with an elevated stage for social functions. The auditorium room will measure 38 x 43 ft. On this floor will be the library, reading room, board and committee rooms, besides the dispensary. The second floor will have the dining room, kitchen, bedrooms and dormitory. The entire building will be constructed of reinforced concrete and concrete foundation. The roofing will be of tile and copper and the mantles of brick. With a frontage of 126 ft. 4 ins. the proposed structure will have a depth of 104 ft. 8 ins. The cottages will be erected along the lines of the main building. They will be built of reinforced concrete and will contain, besides the dining rooms, gymnasiums, shower baths and lockers. Each of the proposed cottages will measure 48 x 68 ft. The cottages will be designated as "C," "D" and "E," and will be 2½ stories high. The buildings will cost $80,000.

The Building Committee of the State Tobacco Warehouse Commission, composed of Governor Crothers, State Senator W. B. Clagett, State Treas. Murray Vandiver and J. S. Rollins, received bids on Feb. 2 in the State Boardroom of the Union Trust Building for the erection of the proposed state tobacco warehouse on Light St. The committee took no action except to order the bids tabulated. They will be submitted to the next meeting of the Commission, when the contract may be awarded. The bids were as follows: John Hiltz Sons & Co., $285,959; H. S. Rippel, $265,204; Henry Smith & Sons Co., $259,800; Charles E. Stockhausen, $263,715; Edward Watters & Co., $271,973; Baltimore Ferro Concrete Co., $254,340; Engineering Contracting Co., $266,175; Thompson-Starrett Co., $265,000; Morrow Bros., $265,559; American Contracting Co., $257,432; Mark P. Wells, $297,719; George A. Fuller Co., Hoen Bldg., $255,000; Noel Construction Co., $258,564; John Waters, $270,567; J. Henry Miller, $287,000; David M. Andrew Co., $266,000; Ambrose R. Stannard, St. James Bldg., New York, $292,000; David Peoples, $295,000; Eugene D. Springer, $300,000; Cramp & Co., $271,850; Monmonier & Sorrell, $325,321.

WASHINGTON, D. C.—The Commissioners of the District of Columbia have recommended award to PAVARINI & WYNE, Munsey Bldg., for the construction of the Business High School, R St., between Seventh and Eighth Sts., N. W., Washington, at his bid of $69,300. A complete list of bids was given on Jan. 28.

CLARKSBURG, W. VA.—Plans are being prepared for an 8 or 9-story brick building, 85 x 100 ft., to be erected at Main and Court Sts. for Nathan Goff at a probable cost of $200,000.

ANDERSON, S. C.—James Knox Taylor, Supery. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office building at Anderson, S. C., to GUDE & CO., Atlanta, Ga., at $52,500. Time, Feb. 1, 1910. A list of bids was given on Jan. 28.

ATLANTA, GA.—Edwin P. Ansley, 71 North Forsyth St., representing Realty Trust Co., awarded contract to H. L. STEVENS CO., of Louisville, Ky., and other cities, for erection of theater and office building. It will have eight stories and will be of fireproof reinforced-concrete construction. There will be a gallery and balcony of theater supported by trusses. Estimated cost, $225,000. A. Ten Eyck Brown, 71 North Forsyth St., Atlanta, is Arch.

NASHVILLE, TENN.—Bids are asked by the University of Nashville until Feb. 17, for erection of hospital building. A structure five stories and basement, fireproof, of reinforced-concrete construction, with brick walls, trimmed with cut stone, elevator, steam heat, electric light and power, refrigerator plant, will be built from plans by Meyer Sturm, Chicago, Ill. C. S. Ferguson is Arch., Nashville.

CINCINNATI, OHIO.—We are officially advised that the proposed building of the Ohio Mechanics' Institute, John L. Shearer, Principal, for which Samuel Hannaford & Sons, Archs., Hulbert Block, have been retained to prepare plans, will consist of a hall, with a seating capacity of 2,000, to be known as the Emery Auditorium; a special wing, 180 x 232 ft., six stories and basement, for shops. The remainder of the building will be used for laboratories, testing rooms, recitation rooms, library and exhibition rooms for industrial products. Architects will let contracts probably in February. It is the intention to have the building finished by the opening of school in 1910. Cost of building, $500,000; equipment, $200,000. It is probable that contract will be let in April.

CLEVELAND, OHIO.—The plans for an exhibition hall for the Cleveland Industrial Exposition prepared by J. Milton Dyer, Arch., have been finished and adopted by the Exposition Executive Committee of the Chamber of Commerce. The building will be 393 ft. long, 250 ft. wide, 60 ft. high in the middle, and will contain a total floor space, floor and balcony of 72,036 sq. ft. The hall will be located on vacant land at East Sixth St. and Lakeside Ave., N. E., diagonally opposite the Central Armory, with which it will be connected by an overhead passage 20 ft. wide. The armory will also be used for exposition purposes. The outside will be finished in white stucco and at night will be illuminated. The interior will be divided into five aisles the length of the building, and five across. William G. Rose is Secy. Executive Com.

Directors of the Cleveland Athletic Club have decided to spend $250,000 for the erection of a clubhouse on Chestnut Ave. east of East Ninth St. Work will be started at once and it is hoped the building will be ready for occupancy on Jan. 1, 1910. Officers for the ensuing year are: W. P. Murray, Pres.; Charles A. Otis, First Vice-Pres.; H. R. Edwards, Second Vice-Pres.; William E. Wall, Third Vice-Pres.; Sam T. Nash, Fourth Vice-Pres.

WARREN, OHIO.—We are officially advised that the DUROLITHIC CO., 460 Ellicott Sq., Buffalo, N. Y., has been awarded the contract for the erecting, complete, the Warren post-office building.

NORTHFIELD, OHIO.—Bids are asked by M. A. Van Horn, Clerk Bd. of Trustees of Northfield Township, until noon, Feb. 27, (readvertisement), for the erection and completion of a town hall. The Moore Architectural & Engineering Co., Everett Bldg., Akron, Ohio, is Arch.

INDIANAPOLIS, IND.—H. B. Burnet, T. B. Laycock and W. M. Cochran, Trustees of Third Christian Church, will ask for bids as soon as plans can be completed, for constructing a church.

The Trustees, Charles W. Moores, Chn., of the Fourth Presbyterian Church, will receive bids for rebuilding the church building as soon as the insurance is adjusted and plans made. Bids will be asked for the construction of new church organ, also.

The Trustees of Witherspoon United Presbyterian Church will receive bids about March 1, for the construction of a brick church on North West St. Rev. D. F. White is Pastor.

Plans have been ordered and bids will be received about March 20 by Rev. Marino Priori, for the construction of an Italian Roman Catholic church on Stevens St.

INDIANAPOLIS, IND.—See item under Manufacturing Plants.

CLINTON, IND.—The Clinton Library Board has agreed on plans for the construction of a Carnegie library building. It will be a 2-story brick structure with stone foundation and stone trimmings. Bids will be called for in about 30 days.

CHICAGO, ILL.—Sites have been purchased and work will be begun within 60 days on the first of three new buildings for the Moody Bible Institute, 80 Institute Pl., the cost of which will be $350,000. The first structure will be a dormitory for men, while those to follow will be a women's building and an administration building. Because the houses that will be razed to make room for the new additions to the institute have been used under rental by the school, it will be necessary to put up the new buildings one at a time on account of congested conditions. The first dormitory building will be six stories high, costing $60,000 and will provide quarters for 80 students. It will stand opposite the present men's building at 81-83 Institute Pl. Its construction and occupation are expected to take up several months, and it probably will be next year before the work on the remaining buildings is begun. The second structure, providing for the women, will be the largest of the three. It will have a frontage of 190 ft. and will cost $175,000. The administrative building will be the last to be erected. This will have seven stories and will contain special class rooms and facilities not included in the plans for the other structures.

SUPERIOR, WIS.—A 3-story lodge building is to be erected either at Ogden or John Ave. at Broadway for the Labor Organization, to cost $40,000. William O'Carroll, George A. Hunter, S. A. Riches and O. E. Mattison comprise Com. in Charge.

MILWAUKEE, WIS.—H. C. Koch & Sons, Archs., 120 Wisconsin St., have been engaged to prepare plans for a 12-story building to be erected at Grand Ave. and Third St. for the Boston Store. Cost, about $1,000,000.

SIOUX CITY, IOWA.—Reinecke & Jenkison, United Bank Bldg., have submitted plans for an addition which it is proposed erecting to the high school, at a cost of $150,000. An election is to be held in the spring to vote on the question of a special tax for this purpose.

CLARINDA, IOWA.—Bids were received as follows on Feb. 8 at the office of James Knox Taylor, Supery. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Clarinda, Iowa: Parsons & Kiene, Omaha, Neb., $63,671; W. W. Welch, Clarinda, Iowa, $60,918; M. Yeager & Son, Danville, Ill., $59,474; F. M. Roode & Co., Tipton, Ind., $58,200; J. W. Miller, St. Paul, Minn., $57,000; Northern Construction Co., Milwaukee, Wis., $62,543; Scheurmann Lumber Co., Ltd., Saginaw, Mich., $57,432; General Construction Co., Milwaukee, Wis., $55,945; Bartlett & Kling, Inc., Cedar Rapids, Iowa, $58,700. Time, March 1, 1910.

FORT SNELLING, MINN.—Bids are asked until 11 a. m., March 1, by Capt. R. C. Croxton, Constr. Q. M., Army Bldg., St. Paul, Minn., for constructing, plumbing, electric wiring and electric fixtures of a quartermaster stable at Fort Snelling.

ST. PAUL, MINN.—Plans are being prepared by the Pabst Brewing Co., John Arend, St. Paul, agent, for construction of a pressed brick and cut stone, fireproof stock house to be built at the foot of John St. Cost, $45,000.

The general contract for improving Bannon & Co.'s department store has been awarded by M. Fitzpatrick, Arch., 17 West Ninth St., to T. REARDON, 726 Dayton Ave., city. Cost, $40,000.

LEAVENWORTH, KAN.—The contract for furnishing steel roof construction for the east and west cell wing at the U. S. penitentiary, Leavenworth, Kan., opened Jan. 25, has been awarded to the PENN BRIDGE CO., of Beaver Falls, Pa., for the sum of $33,987. A full list of bids was given last week.

•OMAHA, NEB.—Bids are asked until Feb. 23 by Conners Bros. Co., Lowell, Mass., for constructing the proposed Douglas County court-house.

ST. LOUIS, MO.—It has been decided by the stockholders of the Union House Furnishing Co. to build an 8-story fireproof building at the corner of Seventh St. and Washington Ave. The following officers have been elected: J. H. Buettner, Pres.; Theodore Crusius, Vice-Pres.; William F. Elicks, Secy.; F. B. Meckfessel, Treas.

SAN ANTONIO, TEX.—Bids were received as follows, on Feb. 4, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at San Antonio, Tex.: T. P. Shields, San Antonio, Tex., $137,500; Tom Lovell & Sons, Denton, Tex., $133,217; Northern Construction Co., Milwaukee, Wis. $150,200; John Bardon, Fort Worth, Tex., $134,400; James S. Skirving, San Antonio, $143,500; Paul Riesen's Sons, Milwaukee, Wis., $160,000; Ambrose B. Stannard, St. James Bldg., New York, $139,000.

SAN MARCOS, TEX.—Dr. J. M. Carroll, Pres. of the San Marcos Baptist Academy, has received the plans of the proposed boys' dormitory to be erected during the spring and summer. The building is to be a 3-story structure of pressed brick, steam heated. The approximate cost is $50,000. It is the intention to locate the building east of the main building of the academy.

OKLAHOMA CITY, OKLA.—The contract to erect the Oklahoma Building at Fourth St. and Broadway has been awarded to the WESTLAKE CONSTRUCTION CO., 717 Locust St., St. Louis, Mo. It is to be five stories high and cost about $140,000.

DENVER, COLO.—The Directors of the Denver Gas & Electric Co. have awarded the contract to erect the 9-story fireproof building on 15th and Chambers Sts. to BENNETT & MEYERS. The cost of the building is to be about $800,000.

It is reported that the Masons are considering the erection of a temple on East 14th Ave. and Grant St., costing $300,000. James H. Peabody is Chn. Bldg. Com.

Richard Philips, Jacobson Bldg., has prepared plans for a 5-story hotel to be erected at 17th and California Sts. at a cost of $60,000. Mrs. A. W. Jacobson is owner.

COLORADO SPRINGS, COLO.—The Trustees of the Myron Stratton Home for the Poor, in which Dr. D. H. Rice and William Lennox, Colorado Springs and Tyson S. Dines, Denver, are interested, may soon want plans for the proposed home to be built, at a probable cost of $500,000.

SPOKANE, WASH.—A joint building, 100 x 142 ft. and three or four stories high is to be built by Child & Day and J. W. Wentworth at the corner of Riverside Ave. and Division St. Plans for the building have been completed by the Ballard Plannery. The building will cost about $75,000.

E. H. Stanton & Co. will build a 200-room hotel near the abattoir, in East Side Syndicate addition. The building will be four stories in height and will cost $40,000.

Plans for a 3-story hotel have been approved by the Northwestern Improvement Co. and construction will begin as soon as weather conditions will permit. It will be heated by steam and will have hot and cold water in all the rooms.

SAN FRANCISCO, CAL.—It is officially stated that the Hall of Justice will be erected on a lot 137 ft. 6 ins. in width by 160 ft. in depth, bounded by Kearny, Washington and Merchant Sts., and what was formerly known as Dunbar Alley. This building will be a 5-story steel frame and masonry fireproof structure, with basement and sub-basement. Its exterior will be finished in a light sandstone on a granite base.

A building to contain a morgue, emergency hospital and county jail is to be built in the rear of the Hall of Justice above described on a piece of land recently purchased by the city, 106 ft. wide, on Washington St., by 137 ft. 6 ins. in depth along Dunbar Alley. The plan has been laid out leaving Dunbar Alley 15 ft. wide, with an alley 15 ft. wide on the east side. These two alleys, with the Washington and Merchant Sts. frontages separate the building from the surrounding property. The morgue proper is to be on the first story of this building and will front on Merchant St. and Dunbar Alley. The Branch Emergency Hospital is to be on the first floor of this building fronting on Washington St., and will contain the necessary wards and rooms for an emergency hospital. The second floor directly over this portion will contain certain detention cells that will be used in connection with the city prison in the handling of the insane and helpless. The entire third story of this building will contain the general office of the county jail, with certain private offices and ward for sick prisoners, bathrooms and the dining room and kitchen. The entire fourth floor will contain the jail proper, which will be made up of a control space including booking office and the general exercise floors for the 208 cells. These cells will be arranged in tiers of 26 each, four stories high. Newton J. Tharp is City Arch.

SAN FRANCISCO, CAL.—The following description of the proposed City and County Hospital has been published in the "Municipal Record" of this city: [illegible] have directed the acquisition [illegible] of land between San Bruno [illegible] as an addition area to the [illegible] hospital on Potrero Ave., [illegible] 22d Sts. The site will be [illegible] 760 ft. wide, and on it will [illegible] main institutions—a general [illegible] pital for the treatment of in[illegible] and another for tubercular [illegible] dition there will be a power [illegible] morgue and ambulance sheds [illegible] situated that they will be w[illegible] distance of the main buildings [illegible] to place the infectious diseas[illegible] high ground at the northeas[illegible] property and the tuberculosis [illegible] southwest corner where the pa[illegible] the advantage of air and sunli[illegible] lian renaissance style of archit[illegible] followed in designing the b[illegible] will be of brick with terra co[illegible] general hospital, which will [illegible] high, will contain 512 beds. [illegible] trance will be in the center o[illegible] Ave. frontage. A courtyard w[illegible] administration building, whi[illegible] three stories, at the sides of [illegible] the several wards. These wa[illegible] east and west and be connected [illegible] ministration building by a co[illegible] will extend the entire length of [illegible] unite all of the structures. T[illegible] building, which will be used as [illegible] and surgical pavilion, will be lo[illegible] north end of the site. Betwee[illegible] administration building will be [illegible] ward buildings, each four storie[illegible] to the rear, but centrally locat[illegible] nected with the main corridor, [illegible] main service building. Two m[illegible] pavilions, also four stories hig[illegible] erected to the east of the admin[illegible] service buildings, and to the sou[illegible] will be the home for the nurses. [illegible] ter of the grounds and at the rear o[illegible] vice building will be a power-[illegible] laundry; to the north and close [illegible] emergency pavilion will be the [illegible] stables. The morgue will be pla[illegible] extreme south of the site and so arranged that a view of its entrance will be impossible from the other buildings. The general plan is on file at the office of Engineering News, New York. Newton J. Tharp is City Arch.

SAN FRANCISCO, CAL. — McSHEEHY BROS. have secured contract, at $75,142, for erecting South End primary school building; LANGE & BERGSTROM, at $17,072, for constructing engine house at Ashbury and Carmel Sts.

The plans of the Madison Primary School on Clay St., near Laurel St., as designed by Newton J. Tharp, City Arch., have been accepted. The building will contain ten rooms and will cost approximately $75,000.

Designs and plans of the proposed building of the Native Sons of the Golden West in this city have been selected by the Hall Association, which soon will take bids and award contracts for the building. A competition, in which several architects were entered, has been held, and the plans of Righetti & Headman, 244 Kearny St., with whom E. H. Hildebrand is associated, were accepted and adopted by the Association. The building will be erected upon the site of the former hall building, on the east side of Mason St., between Post and Geary Sts., the lot having a frontage of 70 ft. and a depth of 137½ ft. The facade will be governed by canons of art in architecture, and the interior arrangement will be devised to take care of crowds in the space allowed for corridors and lobbies. There will be five floors and a high basement in the building, the estimated cost of which will be about $100,000 for a Class C type, and if a Class A building is adopted, the cost will be nearly $40,000 more. The facade will be in pressed brick and terra cotta, with copper cornices.

SALT LAKE CITY, UTAH.—Ware & Treganza, 62 Hooper Bldg., have prepared plans for a 3-story building to be erected on Main St. by Mrs. S. A. McCrystal. Cost, $60,000.

Following are the bids received Jan. 18 by the Salt Lake Stock & Mining Exchange at the office of J. C. Craig, Archt., 409 D. F. Walker Bldg., for erecting the Mining Exchange. Vanderhorst Bros., $73,400; Black & Lester, $66,000; John Shea, $66,840; George Curley, $65,250; A. & J. McDonald and D. J. Armstrong, $60,950.

BOISE, IDAHO.—Mrs. Martha E. McCarty will erect a stone and brick building at the corner of Ninth and Idaho Sts., which will cost about $45,000.

TWIN FALLS, IDAHO.—Bids are asked until March 1 by H. T. West, Clk. Bd County Comrs, for erecting a court-house and jail at Twin City Falls; cost not to exceed $125,000. C. Harvey Smith is Arch., Twin Falls.

VERA CRUZ, MEXICO.—According to the "Mexican Herald" (Mexico City) the Vera Cruz Terminal Co. has awarded the contract for the construction of extensive terminal buildings and yards at this port to S. PEARSON & SON, LTD., and the COMPANIA BANCARIA DE OBRAS Y BIENES RAICES of the City of Mexico. The cost of the improvements will be about $8,000,000, Mexican money. The terminal company is composed of the several railroads which enter Vera Cruz. These include the Interoceanic, the Vera Cruz & Pacific, the Mexican (Vera Cruz), and the Alvarado lines. The joint terminal will be situated adjoining the wharves upon a big tract of filled-in land. All of the buildings will be built of reinforced concrete. They will compose a union passenger station, coach sheds, two large custom warehouses, a bonded warehouse, office building, roundhouse, machine shops, tool houses and repair shops. A reinforced-concrete viaduct about 12,000 ft. long will also be built. The freight yards will embrace about 35 miles of track. It is expected that it will take about two years to complete the work. The fact that the Mexican Government owns the Vera Cruz & Pacific R. R. outright and has a controlling interest in the Interoceanic makes it directly interested in the terminal project. J. W. Richardson is Ch. Engr. of the Vera Cruz Terminal Co.

WATER SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—Bids will be received by W. E. Hannan, Water Comr., until Feb. 12 for furnishing 2,735 tons of pipe and special castings.

SPRINGFIELD, MASS.—A reservoir may be constructed on Rocky Mountain to be used in case of fire.

CANANDAIGUA, N. Y.—The citizens on Jan. 30 voted in favor of expending $150,000 for a new water system, using Spite Creek as the source.

RENSSELAER, N. Y.—The Rensselaer Water Co. will construct a 5,500,000-gallon reservoir, probably of concrete construction, and about 4,000 ft. of 12-in. main to connect with the present system. The contract will be awarded in April. R. L. Hinkley is Supt. Noted on Feb. 4.

*WEBSTER, N. Y.—Plans and specifications are on file at the office of Engineering News, New York, for the construction of water-works, consisting of about six miles of c.-i. pipe, pumping station, a small reservoir, stand-pipe, power pumps and other appurtenances. Bids are asked until Feb. 20 and will be received for the whole work, including or excluding the stand-pipe and pumping equipment and separately for these. Knight & Hopkins, Rome, N. Y., are Engrs.

NORTH ARLINGTON (Arlington post-office), N. J.—Edward Sargent, of Kearney, N. J., submitted the lowest bid on Feb. 3 to the Council for the construction of water-works, at $20,885. Other bidders were: United States Construction Co., $24,254; Salmond Bros., $21,517; John Doriety, $26,435; D. Steffinelli, $24,674; Dennis Dunn, $26,844; Miele D. Bruno, $24,128; McGay Engineering Co., $25,079; Sergeant & Maxwell, $25,177. Wise & Watson, Rutherford, N. J., are Consult. Engrs.

CATASAUQUA, PA.—George C. Morgan, of Chicago, Ill., it is stated, will prepare plans for the construction of water-works here.

LEBANON, PA.—We are officially advised that the City Engineer has presented to the City Council plans and specifications for the enlargement of the South Mountain city water supply. Estimated cost, $22,000. T. R. Crowell is City Engr.

*LEBANON, PA.—Bids are asked until 5 p. m., March 11, by the Board of Water and Light Commissioners for enlarging dam No. 2 of the gravity water supply of the city.

RICHMOND, VA.—We are officially advised that the Committee on Water on Feb. 8 recommended award of contract for reinforced concrete flume between settling basins and new pump house to Piedmont Construction Co., of Atlanta, Ga. List of bidders noted on Feb. 4. Eugene E. Davis is Supt. W.-Wks.

EAST POINT, GA.—Contracts for the construction of water-works here have been awarded as follows: To R. D. COLE MFG. CO., of Newnan, Ga., for boiler and stand-pipe; to the H. R. WORTHINGTON CO., of New York, for pumps; to the AMERICAN CAST IRON PIPE CO., of Birmingham, Ala., for c.-i. pipe; for all construction work to SULLIVAN & LONG, Bessemer, Ala. Contracts for artesian wells have not yet been awarded. E. H. Davis is Engr., Griffin, Ga.

PANAMA CITY, FLA.—The city is considering the construction of water-works and an electric light plant here.

MONTGOMERY, ALA.—Dr. C. C. Thach, Pres., Alabama Polytechnic Institute, was authorized on Jan. 27 by the Building Committee to extend the college water-works system into the town of Auburn.

BIRMINGHAM, ALA.—The Birmingham Water Works Co. will at once begin the construction of the proposed stand-pipe on the top of Red Mountain to furnish water to South Highlands.

HUNTSVILLE, ALA.—HUTCHENS & MURDOCK, of Huntsville, have secured the contract for laying water mains in Patton Addition, East Huntsville, and the Fourth Ward, at 65 cts. per ft. The pipe to be laid is 4-in.

MERIDIAN, MISS.—W. F. Wilcox, Gen. Mgr. Meridian Water-Works, has completed plans and specifications for the reinforced-concrete reservoir and a 5,000,000-gallon pump. The Piedmont Construction Co., Atlanta, Ga., has submitted the lowest bid for the construction of the reservoir.

SCRANTON, MISS.—We are officially advised that the CHICAGO BRIDGE & IRON WORKS, Chicago, Ill., was awarded the contract on Feb. 2 by the city for the erection of a 75,000-gallon steel tank with a spherical bottom of a steel tower 100 ft. high to balcony, at $3,540. Contract price does not include foundation. W. G. Kirkpatrick, Jackson, Miss., is Engr.

CHARLESTON, MISS.—The City Council proposes to issue $20,000 of bonds for the construction of water-works.

JOHNSON CITY, TENN.—The city is considering issuing about $500,000 of bonds for the construction of an adequate water supply system.

EUCLID, OHIO.—Bids will probably be asked about July 1 for the construction of a water-works system here. Estimated cost, $150,000. F. A. Pease Engineering Co. is Engr., Cleveland.

ZANESVILLE, OHIO.—The Federal Water Co., Zanesville, has been incorporated with a capital stock of $10,000.

ROCKFORD, OHIO.—Bonds for $9,000 have been issued for the construction of a water-works system. Fred. Feuchter is Village Clk.

TOLEDO, OHIO.—The cost of water mains for the proposed high-pressure auxiliary system has been estimated at $70,000 for pipe and laying same. The plan was approved by the subcommittee of Council on Jan. 25 and 16-in. mains will be laid in Jackson, Adams, Jefferson, Monroe and Tenth Sts.; 12-in. on Madison St., and 16-in. on Water St. F. I. Consaul is Ch. Engr. Bd. of Pub Service. Noted Feb. 4.

ELYRIA, OHIO.—Bids will be received by the Board of Public Service until noon, Feb. 19, for the purchase of the following supplies for the Water-Works Department for use during the fiscal year 1909: 300 sets, more or less, corporation cocks; 300 sets, more or less, curb cocks. All prices quoted must be f. o. b. Elyria, Ohio, and cocks must conform exactly to sample on file in office of Board. Rose Moriarty is Clk. Bd.

SHIRLEY, IND.—Plans and specifications for the new water plant at Shirley have been completed. They call for a tank of 50,000 gallons capacity on a 110 ft. tower with a reserve basin of 120,000 gallons capacity.

OWOSSO, MICH.—Bids will be received by the Board of Public Works, until 10 a. m., Feb. 24, for the construction complete of a pneumatic pumping plant. The work includes the providing of an air compressor and receiver, and all necessary devices or appliances for installing an air lift in the wells, together with all necessary steam, air and water piping for the complete plant, and all the labor of installing the plant and laying of necessary water and air lines that are to be laid underground.

DECATUR, ILL.—Bids are asked by Albert Leach, City Clk., until Feb. 19 for furnishing engine foundations and other masonry and concrete work, steel work, auxiliaries and piping for the new city water-works pumping station. Daniel W. Mead is Engr., 401 State St., Madison, Wis.

MILWAUKEE, WIS.—Bids will be received by the Board of Public Works until 10.30 a. m., March 1, for furnishing all the materials and doing all the work necessary and required to lay a c.-i. water main 36 ins. in internal diameter, across the Milwaukee River from the foot of Bradford Ave., in the 18th Ward, to the west side in extension of Wright St., in the 13th Ward.

COUNCIL BLUFFS, IOWA.—Plans for settling reservoirs and a clarifying system are being revised by S. L. Etnyre, City Engr.

INTERNATIONAL FALLS, MINN.—Bids are asked until Feb. 17 by the City Clerk, for the installation of a complete system of water-works here. F. B. Green is Village Recdr.

MINNEAPOLIS, MINN.—See item under Civil Service Examinations.

JACKSON, MINN.—Bonds for $13,000 have been sold for improvements to the water-works, including a water tower and tank. L. P. Wolff, of St. Paul, is Engr.

SPOONER, MINN.—The Village Council is considering the construction of a water-works system here.

FORT ASSINNIBOINE, MONT.—Bids are asked until 11 a. m., March 4, by J. E. Sawyer, Ch. Q. M., St. Paul, Minn., for the construction of a 150,000-gallon steel water tank and trestle here.

RUSSELLVILLE, ARK.—See item under Light and Power Plants.

DE QUEEN, ARK.—The city has awarded the contract to the AMERICAN LIGHT & WATER CO., Scarritt Bldg., Kansas City, Mo., at $24,195, for the construction of a water-works. The plant will include a reservoir with a capacity of 50,000 gallons to be erected near power-house, steel tower with tank 131 ft. high, steam pump, motor pump and 21 fire plugs.

ELGIN, TEX.—The citizens on Jan. 20 voted in favor of issuing $30,000 of bonds for the construction of water-works.

MUSKOGEE, OKLA.—Bids will be received by Morgan Caraway, City Clk., until March 1 for a 4,000,000-gallon crank flywheel pump.

COWETA, OKLA.—The city has engaged A. Swanwick, Consult. Engr., Joplin, Mo., to prepare plans for a water-works system here.

GREELEY, COLO.—The Wildhorse Reservoir & Land Co. filed articles of incorporation on Jan. 27 with the County Clerk. L. C. Allen, A. D. Lewis and J. Wylie Anderson are the incorporators. The company is capitalized for $50,000 and will get water for its reservoir from Wildhorse Creek in eastern Weld County.

SILT, COLO.—Bids will be received by the Antlers-Orchard Development Co. about Feb. 20 for furnishing material and constructing an irrigation system in the Grand Junction Valley at Silt. Estimated cost, about $100,000. A. G. Allan, of Solt, is Engr.; E. A. Sunderlin, Mining Exchange Bldg., Colorado Springs, Colo., is Gen. Mgr. Noted on Jan. 21.

OREGON CITY, ORE.—The capacity of the water system will be increased one-half by installing new pumps and constructing a new reinforced concrete pumping station.

PETALUMA, CAL.—Bids will be received by the City Clerk of the Board of Trustees until 7 p. m., May 5, for furnishing and installing the pumping machinery for a salt-water high-pressure fire system for the city.

SALT LAKE CITY, UTAH.—The Wyuta Development Co., Evanston, Wyo., and Salt Lake City, is preparing to build an extensive system for irrigation and power purposes. Some of the applications for water have been made and preliminary plans have been prepared.

MINIDOTA, IDAHO.—The contract has been awarded to the FULTON ENGINE WORKS, Los Angeles, Cal., for pump pit gates and controlling mechanism for the Minidota irrigation project, Idaho, at $10,994.

WINNIPEG, MAN.—H. N. Ruttan, City Engr., in his report on the water softening questions has made the following recommendations: That the old softening plant at well No. 2 be rearranged to provide a capacity of 5,000,000 gallons; that a new plant with 5,000,000 gallons capacity be built at well No. 5, and that a third plant of 2,000,000 gallons capacity be located at well No. 6. Estimated cost, $150,000.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

LENOX, MASS.—J. M. Johnson, Chn. Sewer Committee, has estimated the cost of constructing sewers here at $20,000.

NEW BRITAIN, CONN.—The Sewer Department is considering the construction of the Black Rock sewer system. Estimated cost, $20,000.

NEW LONDON, CONN.—Bids will be received by the Board of Water and Sewer Commissioners, W. H. Richards, Engr., until March 1, for constructing and laying a submerged wooden outfall sewer and settling basin and laying tile pipe connections.

MEDINA, N. Y.—Charles Ingersoll, of Medina, has been selected to prepare plans for the construction of a sewer system for the west side of the village. D. D. Holdredge is Pres. Sewer Comrs.

BROOKLYN, N. Y.—The contract for constructing a temporary sewer and appurtenances at Ridgewood, to connect with St. Nicholas Ave. sewer, thence through Grove St. to the Wyckoff Ave. sewer in Brooklyn, and a pumping chamber for the same, was awarded on Feb. 3 by Lawrence Gresser, Pres. Boro. of Queens, to CHARLES READ, at $5,635. This plant is to be built in the next 60 days to afford temporary relief for the Ridgewood residents, who have the Myrtle Ave. main completed to the Brooklyn line, but have no outlet for it.

ROCHESTER, N. Y.—Bids will be received until Feb. 24 by the State Commission in Lunacy, Albany, T. E. McGarr, Secy., for the sewer and ejector at the Rochester State Hospital, Rochester. Franklin B. Ware is State Archt., Albany.

*BUFFALO, N. Y.—Bids will be received until Feb. 18 by the Board Public Works for constructing brick and tile sewers in portions of numerous street. F. G. Ward is Comr. Pub. Wks.

BUFFALO, N. Y.—Bids are asked until 11 a. m., Feb. 18, by the Department of Public Works for the construction of sewers in various streets. F. G. Ward is Comr.

*KINGS PARK (L. I.), N. Y.—Bids will be received until Feb. 24 by the State Commission in Lunacy, Albany, N. Y., T. E. McGarr, Secy., for sewerage and sewage disposal works; also alterations to plumbing in Wards 41, 42, 43, 44, 47, 48 and 49 at Kings Park. Franklin B. Ware is State Archt.

BINGHAMTON, N. Y.—John A. Giles, City Engr., has estimated the cost of constructing a sewage disposal plant at about $200,000.

COLLEGE HILL (Beaver Falls post-office), PA.—See item under Streets and Roads.

RICHMOND, VA.—The City Council is considering the issuance of from $500,000 to $1,000,000 of bonds for the construction of sewers. This is to be included in the appropriation of $2,747,486 for street and sewer work asked for by the Street Committee; Charles E. Bolling is City Engr.

PARKERSBURG, W. VA.—R. T. MARTIN, has secured the contract, at $5,919, for constructing sewers in the Seventh and Eighth Wards. Frank Good is Audr.

MERIDIAN, MISS.—The city will soon award the contract for construction of eight sewers here.

LOUISVILLE, KY.—Bids will be received by the Commissioners of Sewerage until Feb. 26 for the construction of the Twelfth St. sewer, Contract 25. J. B. F. Breed is Ch. Engr.; Harrison P. Eddy, 14 Beacon St., Boston, Mass., is Consult. Engr.

TROY, OHIO.—The contract for constructing 3,700 ft. of 30 and 36-in concrete sewer, bids opened on Jan. 23, has been awarded to D. C. BOWER, of Troy, at $5,350. H. J. Walker is County Engr.

LOUISVILLE, OHIO.—Plans are being completed for the construction of sewers and a sewage purification plant here.

HAMMOND, IND.—Plans are being prepared by J. Lyons, City Engr., for extending the sewer on Columbia St. to the river.

FORT WAYNE, IND.—The Board of Public Works has ordered plans for the construction of a sewer in Vermont Ave., from California St. to Kentucky Ave., and a sewer in the alley between Crescent Ave. and California St. E. J. Lenon is Chn.

MANISTEE, MICH.—Bids will be received about March 1 for the construction of crock tile sewers here. Estimated cost, $10,000. James E. Craig is City Engr.

CHEBOYGAN, MICH.—The city contemplates extensive improvements and additions to the present sewer system. George Case is City Clk.

CAIRO, ILL.—GARNER & HANES have been awarded the contract by the Board Local Improvements, at $17,170, for constructing vitrified tile pipe sewers in the 34th St. sewer district. List of bidders noted on Feb. 4.

SPRINGFIELD, ILL.—The contract for constructing Fifth and Fourth St. sewers, 18-in. pipe, has been awarded to JOHN SPENCE, of Springfield, at 79 cts., and 40 cts. for 12-in. inlet pipe, and 83 cts. and 39 cts. for 12-in. inlet pipe.

STERLING, KAN.—Bids will be received by the city about April 1 for the construction of a sewer, including 6 and 12-in. tile sewer pipe, automatic flush tanks and septic tank filter bed. G. L. McLane, Hutchinson, Kan., is Engr.

MARION, KAN.—We are officially advised that the contract for the construction of about 2½ miles of main and lateral sewers was awarded on Feb. 2 by the City Council to the SQUIRE ELECTRIC & CONSTRUCTION CO., 614 Wyandotte St., Kansas City, Mo. Estimated cost, $7,514.

GRAND FORKS, S. DAK.—Plans are being prepared by the City Engineering Department for the construction of the De Mers Ave. sewer. Estimated cost, between $40,000 and $50,000.

MITCHELL, S. DAK.—The City Council has authorized the Sewer Committee to engage an engineer to prepare plans and specifications for the construction of sewers here.

MINERAL WELLS, TEX.—The city has decided to expend about $15,000 for the construction of sewers here.

HOUSTON, TEX.—Bids will soon be received by the city for installing a drainage sewer system and constructing sanitary sewers. Estimated cost $250,000 and $225,000, respectively. Mentioned Nov. 10.

BELLINGHAM, WASH.—It is proposed to extend the sewer from the end of Champion St. up Whatcom Creek one mile. It will be of reinforced concrete, 3 ft. 3 ins. x 6 ft. and 2 ft. 6 ins. x 5 ft. Estimated cost, including concrete dam, 42 ft. long, across Whatcom Creek, with flushing inlet, $75,884. Bids will be received in about six weeks. H. W. Troutman is City Engr.

SAN FRANCISCO, CAL.—The Board of Public Works on Jan. 29 awarded the contract for laying the southerly section of the East Potrero intercepting sewer to the EUREKA CONSTRUCTION CO., at $98,209. Marsden Manson is City Engr.

GARBAGE DISPOSAL.

FORT SLOCUM (New Rochelle post-office), N. Y.—Crematory.—See item under Buildings.

BALTIMORE, MD.—F. T. LYNCH was awarded the contract on Feb. 3 by the Board of Awards for furnishing 15 new garbage carts at $2,095.

YOUNGSTOWN, OHIO.—The City Council is considering the erection of a municipal garbage reduction and disposal plant this summer. Investigation of various municipal plants has been made and reported upon favorably. The cost of the proposed plant, which will be of 20 tons daily capacity, will be about $50,000.

SACRAMENTO, CAL.—The City Engineer has presented plans and specifications for an additional unit to the city garbage crematory of a capacity of 40 tons daily. The plans have bene adopted.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

HARTFORD, CONN.—The Board of Street Commissioners have authorized laying of a sidewalk and curb on Garden St., from Albany to Homestead Aves. The Board will give hearings on Feb. 17 on the laying of sheet asphalt on Farmington Ave., from Woodland St. to Sisson Ave., and also laying granite block on Capitol Ave.

BROOKLYN, N. Y.—Bids were received as follows on Feb. 3 by Bird S. Coler, Boro. Pres., for (a) regulating, grading, curbing and laying sidewalks on various streets and avenues, with all work incidental thereto; (b) regulating and paving with asphalt on a concrete foundation the roadway of various streets and avenues with all work incidental thereto; (c) regulating, grading, curbing and laying sidewalks on various streets and avenues, with all work incidental thereto: (a) O'Grady Bros., 72 Eighth St., Brooklyn, $2,103; Moran-Crowley Co., $2,238; (b) Cranford Co., 52d St., Brooklyn, $24,153; Uvalde Asphalt Paving Co., $28,213; Barber Asphalt Paving Co., $24,294; Standard Asphalt & Rubber Co., $25,575; (c) James Quinn Contracting Co., 36 Kenmore Pl., Brooklyn, $11,195; Daniel Douglas, $15,068; John M. Fox, $12,465; National Cement Construction Co., $12,480; P. T. McDermott, $11,951.

NEW YORK, N. Y.—Bids were received as follows on Feb. 8 by John F. Ahearn, Pres. Boro. of Manhattan, for maintaining the asphalt pavement on the following streets where the original contracts have been abandoned, Borough of Manhattan: 27th St., from Madison to Fifth Ave.; 28th St., from Eighth to Ninth Aves.; Eighth Ave. (Central Park West), from 59th St. to 110th St.; First Ave., from 49th to 51st Sts.; from 54th to 56th Sts., from 60th St. to 61st St., from 72d to 74th St., from 83d to 84th Sts., from 85th to 86th Sts., from 91st to 92d Sts.; Ave. D, from Houston to 11th Sts.; 19th St., from Sixth to Seventh Aves.; 20th St., from Fourth Ave. to Broadway; 29th St., from Lexington to Fifth Ave.; Clark St., from Brooms to Spring Sts.; Spring St., from Sullivan to Clark Sts.; Spring St., from Hudson to Greenwich Sts.; 21st St., from Fourth to Fifth Aves.; 21st St., from Sixth to Eighth Aves.; 22d St., from First to Second Aves.; 22d St., from Eighth to Eleventh Aves.; Park St., from Mott to Centre Sts.; Baxter St., from Park Row to Grand St.; Bayard St., from Baxter to Division Sts.; Franklin St., from Baxter to Centre Sts.; Hester St., from Bowery to Centre St.; Mott St., from Park Row to Broome St.: Vulcanite Paving Co., 1170 Broadway, New York, $24,004; Continental Asphalt Paving Co., $35,264; Uvalde Asphalt Paving Co., $29,275; Standard Asphalt & Rubber Co., $32,719; Warren Asphalt Paving Co., $36,067.

Bids were also received as follows for repairing and maintaining the sheet asphalt pavement in the Borough of Manhattan: Uvalde Asphalt Paving Co., $155,400; Standard Asphalt & Rubber Co., $212,640; Warren Asphalt Paving Co., $209,420; Barber Asphalt Paving Co., 30 Church St., New York, $133,560.

NEW YORK, N. Y.—Bids were received as follows on Feb. 8 by John F. Ahearn, Pres. Boro. of Manhattan, for maintaining the asphalt pavement on the following streets: (a) Dutch St., from John to Fulton St.; Pearl St., from Broad to Whitehall Sts.; 45th St., from Sixth to Eighth Aves.; Fourth St., from Lewis St. to Second Ave.; Third St., from Lewis St. to Second Ave.; Lawrence St., from 126th St. to Broadway; 126th St., from Lawrence St. to St. Nicholas Ave.; 129th St., from Broadway to Manhattan St.; Sixth St., from Ave. B to Lewis St.; Seventh St., from Ave. C to Lewis St.; 60th St., from First to Third Aves.; Lewis St., from

Houston St. to south side of Third St.; Lewis St., from 75 ft. north of Fourth St., to south side of Fifth St.; Lewis St., from 30 ft. north of Fifth St. to Eighth St.; Astor Pl., from Broadway to Fourth Ave.; Eighth St., from Broadway to Fourth Ave.; 126th St., from Fourth to Fifth Aves.; 126th St., from Seventh to St. Nicholas Ave.; 130th St., from Fifth Ave. to Lenox Ave.; 130th St., from Seventh to Eighth Aves.; First Ave., from 20th to 26th Sts.; First Ave., from 35th St. to 36th St.; First Ave., from 36th to 49th Sts.; First Ave., from 51st to 54th Sts.; First Ave., from 56th to 60th Sts.; First Ave., from 61st to 72d Sts.; First Ave., from 74th to 83d Sts.; First Ave., from 84th to 85 th Sts.; First Ave., from 86th to 91st Sts.; First Ave., from 92d to 119th Sts.; 120th St., from Fifth Ave. to East River; Stuyvesant St., from Second to Third Aves.; Ninth St., from Stuyvesant St. to University Pl.; University Pl., from south of Waverly Pl. to north side of Fourth St.; Fourth St., from Broadway to Macdougal St.; Waverly Pl., from Broadway to Fifth Ave.; Washington Pl., from Broadway to University Pl.; Mercer St., from Fourth to Fifth Sts.; (b) 80th St., from Ave. A to First Ave.; Fifth Ave., from 60th to 80th Sts.; 15th St., from Second Ave. to Irving Pl.; 15th St., from Sixth to Tenth Aves.; 40th St., from Eighth to Eleventh Aves.; 48th St., from First to Lexington Aves.; 51st St., from First Ave. to 88 ft. east of Park Ave.; 54th St., from Lexington to Madison Aves.; 58th St., from Third to Lexington Aves.; Macdougal St., from Spring St. to Waverly Pl.; Pell St., from Bowery to Mott St.; Pitt St., from Broome to Houston Sts.; 61st St., from First to Madison Aves.; 68th St., from First to Third Aves.; Tenth St., from Stuyvesant St. to Fifth Ave.; Twelfth St., from Fifth to Sixth Aves.; 31st St., from Fourth to Fifth Aves.; Waverly Pl., from Fifth Ave. to Macdougal St.; 58th St., from Seventh to Tenth Aves.; Suffolk St., from Division to Houston Sts.; 44th St., from Fifth to Sixth Aves.; 46th St., from First to Fourth Aves.: (a) Vulcanite Paving Co., 1170 Broadway, $22,565; Uvalde Asphalt Paving Co., $27,515; Standard Asphalt & Rubber Co., $30,745; Warren Asphalt Paving Co., $33,894; (b) Vulcanite Paving Co., 1170 Broadway, $21,466; Continental Asphalt Paving Co., $31,511; Uvalde Asphalt Paving Co., $26,170; Standard Asphalt & Rubber Co., $29,236; Warren Asphalt Paving Co., $32,233.

NEW YORK, N. Y.—Bids were opened on Jan. 21 by Louis F. Haffen, Pres. Bronx Borough, for paving work. The following are the lowest bids: For asphalt on a concrete foundation, roadway and sidewalks on bridges over New York, New Haven & Hartford R. R., at Longwood Ave., Tiffany St. and other streets, Asphalt Construction Co., Madison Ave. and 151st St., 10,800 sq. yds. asphalt on roadways, at $1.34, and 5,500 sq. yds. on sidewalks, at 65 cts.; total, $18,047. Asphalt on roadways and sidewalks of bridges over New York, New Haven & Hartford R. R. at East 149th St., Leggett Ave. and other streets: Same, 6,150 sq. yds. asphalt pavement on roadways, $1.34, and 4,050 sq. yds. asphalt on sidewalks, 65 cts.; total, $10,873. Paving with asphalt block on concrete foundation Cambreling Ave. and setting curb: Barber Asphalt Paving Co., 30 Church St., 7,300 sq. yds. asphalt block pavement and keeping the same in repair for one year, $1.45; 1,240 cu. yds. concrete, including mortar bed, $6; 420 lin. ft. new curb, furnished and set in concrete, 94 cts.; 5,000 lin. ft. old curb, rejointed, recut on top and reset in concrete, 39 cts.; total, $20,370. Regulating, grading, setting curb, flagging sidewalks, laying crosswalks, building approaches and placing fences in Leggett Ave.: F. V. Smith Construction Co., 68,500 cu. yds. fill, 15 cts.; 2,525 lin. ft. new curb, 75 cts.; 9,275 sq. ft. new flag, 24 cts.; 3,659 sq. ft. new bridge-stone for crosswalks, furnished and laid, 50 cts.; 300 cu. yds. dry rubble masonry, in retaining walls, culverts and gutters, $1.50; 2,200 lin. ft. new guard rail in place, 20 cts.; total, $17,110.

ROCHESTER, N. Y.—Bids were received as follows on Feb. 3 by the Board of Contract and Supply for asphalt repairs for 1909: Whitmore, Rauber & Vicinus, Rochester, $34,389; Rochester Vulcanite Pavement Co., $34,494; F. C. Lauer & Sons Co., $36,225.

BUFFALO, N. Y.—Bids for macadamizing the Hamburg Turnpike were opened on Feb. 4 by the Department of Public Works, Frank V. E. Bardol was the lowest bidder on the entire work at $111,700. The other bidders were: H. P. Burgard Co., $142,000; Thomas Brown Contracting Co., $144,158; German Rock Asphalt & Cement Co., $151,119; J. F. Stabell Co., $250,072; William J. White, $8,000. The Thomas Brown Contracting Co. and William J. White bid on portions of the work. The paving is to be done for a distance of about 8,000 ft., or from the city ship canal to the city line, the width being 50 ft. F. G. Ward is Comr.

WATERTOWN, N. Y.—Bonds for $70,000 have been sold for road improvements in Jefferson County.

GREENSBURG, PA.—R. D. HUNTER and J. N. HAMMOND, of Beaver, Pa., have been awarded the contract for paving 4½ miles of brick road from Jeannette to Greensburg in Westmoreland County. Estimated cost, about $80,000.

EASTON, PA.—Bids are asked by the Department of Highways of the city until 7.45 p. m., Feb. 15, for furnishing such quantities of crushed stone and trap rock as may be needed by the city for year ending March 31, 1910. John McNeal is City Engr.

COLLEGE HILL (Beaver Falls post-office), PA.—Bids will be received until Feb. 19 by the Town Council of the Borough of College Hill for improving a portion of College Ave., requiring 9,000 sq. yds. of vitrified brick pavement and 2,800 lin. ft. of from 20 to 36-in. storm sewer. Carl S. Donaldson is Boro. Engr., Federal Trust Bldg., Beaver Falls.

*PHILADELPHIA, PA.—Bids are asked by the Department of Public Works until Feb. 15 for repairing Market St. The specifications provide for alternate bids for Eastern granite blocks, asphalt and wood block for the permanent repaving of the street from the Delaware to the Schuylkill rivers, the paving to be laid on a 6-in. cement concrete foundation in each case. The paving materials specified are respectively selected Eastern granite block, refined natural asphalt and Southern long-leaf yellow pine block, not less than 90% heart. The wood blocks are to be treated throughout with an antiseptic and waterproof mixture, 75% of which shall be creosote or heavy oil and coal tar, with not more than 25% resin. After 20 lbs. per cu. ft. of the mixture shall have been injected so that all parts of each individual block shall be thoroughly treated, each block shall weigh as much as water. In the event of wood block or asphalt being selected the specifications provide that that part of Market St. between Delaware Ave. and Second St. shall be paved with Eastern granite block. George R. Stearns is Dir. Pub. Wks.

GREENFIELD, MD.—Bids are asked until 10 a. m., Feb. 18, by Charles H. Troy, County Audr., for constructing macadam road on line between Hancock and Marion Counties.

CHASE CITY, VA.—Chase City District has had surveys made by state engineers for macadam roads leading from city. The principal streets of the city will be paved. P. St. J. Wilson is State Highway Comr., Richmond, Va.

PORTSMOUTH, VA.—Bids are asked until March 1 by Norfolk County for constructing a macadam road from Norfolk to Great Bridge.

PITTSBORO, N. C.—The city is considering the issuance of $5,000 of bonds for street improvements.

MOORESVILLE, N. C.—Bids will be received until March 1 by the County Commissioners, Statesville, N. B. Mills, Chn., for constructing four miles of macadam roads near Mooresville. C. M. Mills, of Salisbury is Engr.

ROME, GA.—Floyd County is considering the issuance of $200,000 of bonds for road improvements.

ALBANY, GA.—The City Council on Jan. 30 decided to pave Broad St. with vitrified brick, 25 ft. on each side, with 30 ft. of hard macadam in center. Estimated cost, $10,260.

PALMETTO, FLA.—Contracts for street paving will probably be awarded this month. E. F. Wilson is Mayor.

TAMPA, FLA.—The Tampa Bay Land Co. has awarded the contract to COOK & KELLER, of Tampa, for two miles of paving at Palma Ceia Park. The paving is to be of shell with a 15-ft. roadbed.

HUNTSVILLE, ALA.—The contract for paving portions of Randolph, Franklin and Clinton Sts. with asphalt and brick gutter, bids opened on Jan. 19, has been awarded to the MINERAL RUBBER PAVING CO., of Memphis, Tenn., at $39,000. R. C. Smith is Mayor.

BIRMINGHAM, ALA.—The Street Committee of the City Council on Feb. 3 awarded the contract to the BLANE PAVING CO., Chicago, Ill., for laying pavement along 26th St., from Highland to Madison Aves. The pavement will be of granitoid block.

OPELOUSAS, LA.—Bids are asked until Feb. 15 by the city for the construction of 35,000 sq. ft. of cement sidewalks and 7,000 lin. ft. of brick curbing. Estimated cost, $10,000. Bids for this work have been received and rejected owing to irregularities. M. Halpen is Mayor.

NASHVILLE, TENN.—J. A. Webb, of Nashville, is the lowest bidder at $3,386, for grading, bedding and macadamizing Belmont Ave. a distance of about 2,600 ft. Bids were opened on Jan. 30. W. W. Southgate is City Engr.

MEMPHIS, TENN.—The Legislative Council has approved the proposed $1,000,000 bond issue for street, sewer and bridge purposes.

YOUNGSTOWN, OHIO.—Bids will be received until Feb. 13 by the Commissioners of Road District No. 1, Mahoning County, Frank Agnews, Secy., Youngstown, for furnishing material and turnpiking Salt Springs Road, Division No. 1, 6,100 ft., and Vestal Road, Section No. 1, 4,800 ft.; also for furnishing and hauling 660 tons of limestone for repairing Section No. 1 of the Boardman Road.

NEWTOWN, OHIO.—Bids will be received until Feb. 27 by the Village Council for grading, curbing and guttering Main St. Edgar M. Griffin is Village Clk.

TOLEDO, OHIO.—Bids will be received until Feb. 16 by the Board Public Service, Reynold Volt, Secy., for furnishing material and paving portions of Hawley and Cambridge Sts., Georgia and Western Aves. and an alley.

CLEVELAND, OHIO.—The lowest bids opened on Jan. 30 by the County Commissioners for paving York Road, a distance of five miles, with brick were as follows: W. S. Pace, of Chicago, Ill., with cement curb, $109,213; Enterprise Paving & Construction Co., $108,800. W. F. Black is Comr.

RAVENNA, OHIO.—Bids will probably be asked in April for about two-thirds of a mile of brick paving.

NORWOOD (Cincinnati post-office), OHIO.—Bids will be received until Feb. 15 by the Board Public Service for grading, macadamizing, constructing concrete curbs and paving with vitrified brick a portion of Cleneay Ave.

CINCINNATI, OHIO.—Bids are asked until noon, Feb. 19, by the County Commissioners for the improvement of the Waltar Creek Road. Fred. Drehs is Clk. Comrs.

NEWTON, OHIO.—Bids are asked until noon, Feb. 27, by the Village Council for grading and constructing curbing and gutters on Main St. Edgar M. Griffith is Clk. Council.

CLEVELAND, OHIO.—The County Commissioners received bids on Jan. 30 for paving York Road for five miles, through Parma and Royalton Townships. The Enterprise Paving & Construction Co. was low on brick, with stone curb, at $108,800. W. S. Pace, Chicago, was low on brick, with cement curb, at $109,213 W. F. Black is Clk. Comrs.

Bids were received on Feb. 3 for the paving of Columbia Road, west of the city, for a distance of six miles leading to Olmstead Village. The lowest bidders were E. A. Freshwater & Sons, at $109,296 for brick with concrete curb and $111,213 for brick with stone curb.

LORAIN, OHIO.—We are officially advised that all bids have been rejected by the Board of Public Service for construction of delinquent sidewalks and crosswalks this year. Bids were opened on Jan. 23.

LAPORTE, IND.—The County Commissioners on Feb. 4 opened bids for macadamizing the Ginther and Small roads in Center Township. Both contracts were awarded to W. B. HUTCHINSON, Michigan City, at $15,640 and $10,200, respectively.

FOWLER, IND.—The Benton County Commissioners have let the contract for the Fowler St. improvement to FRANK E. CONES, at $31,641.

INDIANAPOLIS, IND.—The Board of Public Works will soon ask for bids for the opening and improvement of Garfield Ave., from Michigan to Walnut Sts.

Contracts have been awarded as follows: To WILLIAM H. HOLL, for construction of cement walks in Lawrence and Boyd Aves., at $1.01 and $1.09 per lin. ft., respectively; to HENRY MAAG, cement walk and curb in Rural St., at $1.19 per lin. ft.; to LAKEY BROS., brick roadway in Bates St., at $2.62; to A. D. BOWEN, grading and graveling roadway, cement walks and curb, at $2.33. Blaine H. Miller is City Engr.

MARION, IND.—The Commissioners of Grand County will soon ask for bids for the construction of a boulevard from the city out to the Soldiers' Home. Estimated cost, $51,000.

DANVILLE, IND.—Bids are asked by the Commissioners of Hendricks County until March 1, for the construction of three gravel roads, one in Middle and Union Townships, 14,572 ft. in length, and two wholly in Middle Township, 12,983 ft. and 15,236¼ ft. in length, respectively. William H. Nichols is County Audr.

CRAWFORDSVILLE, IND.—Bids are asked by the Commissioners of Montgomery County until 10 a. m., March 2, for the construction of a gravel road in Clark Township known as the Harshbarger road and for the construction of a gravel road in Clark Township known as the James T. Miller road. B. B. Engle is County Audr.

VINCENNES, IND.—Bids are asked by John T. Scott, Audr. Knox County, until 2 p. m., March 2, for the construction of a gravel road in Vincennes 7,605 ft. in length, a gravel road in Vigo Township 5,310 ft. in length, and for a gravel road in Vincennes Township 6,010 ft. in length.

COLUMBUS, IND.—Bids are asked by the Commissioners of Bartholomew County until 10 a. m., March 1, for the construction of 5,177 ft. of macadamized road in Columbus Township, known as the Marr road. John M. Davis is County Audr.

LANSING, MICH.—The City Council has ordered estimates prepared for paving with brick on a concrete foundation, Cedar St., one-half mile, and Shiawassee St. H. A. Collar is City Engr.

OTTAWA, ILL.—It is proposed to pave portions of Superior, Washington, Lafayette, Jackson, Paul, Post and Gulon Sts. by grading, draining, curbing and paving with vitrified brick. Estimated cost, $42,384. Also portions of Clinton, Superior, Washington, Lafayette, Jackson and Jefferson Sts. by grading, draining, curbing and paving with vitrified brick. Estimated cost, $34,562. W. H. Irwin is Engr. and Secy., Bd. Pub. Improvements.

SOUTH OMAHA, NEB.—The City Council on Jan. 26 awarded the contract for grading, curbing and paving a portion of West L St. to the NATIONAL CONSTRUCTION CO., at $33,718.

KANSAS CITY, MO.—Bids are asked until 2 p. m., Feb. 16, by the Board Public Works for the construction of about 50,000 sq. yds. of asphalt pavement on various streets and about 6,000 sq. yds. of sandstone block pavement. Robert W. Goodnow is Secy. Bd.

ST. LOUIS, MO.—Contracts for street improvements calling for an expenditure of approximately $80,000 were awarded by the Board of Public Improvements on Feb. 3, as follows: Burd Ave., between Minerva Ave. and Easton Ave., asphalt, the PARKER WASHINGTON CO., $13,446; Maryville Ave., between the United Rys. Co. right-of-way and Maple Ave., asphalt, same, $4,951; Michigan Ave., between Miami St. and Cherokee St., asphalt, TRINIDAD ASPHALT MFG. CO., $15,353; Garfield Ave., between Clara Ave. and Goodfellow Ave., bitulithic, GRANITE BITUMINOUS PAVING CO., $13,078; Lucretia Ave., between Minerva Ave. and Wells Ave, bitulithic, same, $13,152; Rutger St., between Newstead Ave. and Taylor Ave., same, $7,556; McDonald Ave., between Grand Ave. and Gustine Ave., bitulithic, same, $21,031, and Smith St., between Wharf and Lewis Sts., granite.

HOUSTON, TEX.—Bids are asked until noon, Feb. 16, by John B. Aahe, County Audr., for paving Hardy St.

GALVESTON, TEX.—The city contemplates issuing $125,000 of bonds for the grade-raising of certain streets and blocks.

PALESTINE, TEX.—Anderson County is considering issuing $500,000 of bonds for road improvements.

HAMLIN, TEX.—The city has increased the original contract with the CEMENT SIDEWALK CO. for paving Union Ave. from 3,000 to 5,000 ft. When this contract is completed work will begin on Jackson Ave., where about 15,000 ft. w[illegible] laid in the residence portion of the to[illegible] under present contract.

SEATTLE, WASH.—Th[illegible] were received on Jan. 29 [illegible]owing bids Public Service for paving [illegible]e Board of Fourth Ave. South with vit[illegible] Ave. and Adam & Co., Seattle, $53,[illegible] brick; Mac-crete Co., Pacific Block, S[illegible] Coast Con-RYAN, Sullivan Block, [illegible] $48,282; T. (awarded contract); Paul [illegible] $47,906 tle, $49,881; C. J. Erickss[illegible]rup, Seat-St., Seattle, $51,638; Hans [illegible] Columbia Bldg., Seattle, $51,868; Mea[illegible]on, Alaska Seattle, $53,438; Sparger Co[illegible] & Babcock, man Block, Seattle, $48,936. [illegible] Co., Cole-is City Engr. [illegible] Thomson

FORT LAWTON, WASH.—[illegible] are asked by W. S. Wood, Q. M., U. S. [illegible] until 11 a. m., Feb. 16, for the construc[illegible] a gravel road at Fort Lawton.

SEATTLE, WASH.—F. McL[illegible]AN & CO., Burke Block, Seattle, have be[illegible]arded the contract for paving Washing[illegible] and other streets, bids opened on Jan. 2[illegible] $132,341. R. H. Thomson is City Engr. [illegible] of bidders noted on Feb. 4.

BELLINGHAM, WASH.—Pl[illegible] and estimates have been submitted [illegible]aving as follows: Magnolia and Dock S[illegible] about 11,800 sq. yds., estimated cost, b[illegible] $49,071; asphalt, $42,891; wood block, [illegible]804. H. W. Troutman is City Engr.

BELLINGHAM, WASH.—CH[illegible]LES E. LIND secured contracts on Ja[illegible] for the improvement of Franklin St., [illegible] Elk to Maryland St., by clearing, grad[illegible], gravel-ing and constructing cement [illegible]walks, at $19,386.

EUGENE, ORE.—Bids were op[illegible] on Jan. 25 by the City Council for pav[illegible] portions of Olive St., West Eleventh St. [illegible] Pearl St. The contract was awarded to [illegible] WARREN CONSTRUCTION CO.

LOS ANGELES, CAL.—The [illegible]PATILLO CONSTRUCTION CO. was awarde[illegible] the contract on Jan. 27 by the Board Public Works Homer Hamlin is City Engr.

*WINNIPEG, MAN.—Bids are asked by the Chairman Board of Control for the supply of from 2,500 to 3,500 tons of asphalt for street paving for the city, until 11 a. m., Feb. 24. M. Peterson is Secy. Bd.

MANUFACTURING PLANTS.

(* *denotes that this work is advertised in Engineering News.*)

LAWRENCE, MASS.—The directors of the Pacific Mills have acquired a tract of land on Merrimack St., east of the Wood Worsted Mills, and it is reported that the corporation will erect a big print works on the site. The property includes all the land along the south bank of the Merrimack River from the eastern end of the land owned by the Wood Mills to the property of the Brightwood Mfg. Co. There is a frontage of about 1,400 ft. on Merrimack St., and the lot is about 500 ft. deep, and contains about 16 acres of land.

WEBSTER, MASS.—We are officially advised that the contract has been let by Charles T. Main, Mill Engr. and Arch., 45 Milk St., Boston, Mass., to the TORRINGTON BUILDING CO., Torrington, Conn., for the proposed shoe factory for the A. J. Bates Co., Webster, Mass. Plans and specifications on the superstructure are ready for bidders.

THOMPSONVILLE, CONN.—The Upson-Martin Co. has awarded the contract for 26 axminister looms to the G. H. BUSHNELL PRESS CO., of Thompsonville.

HARTFORD, CONN.—George B. Allen, Mill Engr., of Hartford, is receiving bids for construction of a brewery in this state of 30,000 bbls. capacity.

FORT H. G. WRIGHT (New London, Conn., post-office), N. Y.—Bids are asked until 10 a. m., March 1, by Capt. Charles T. Baker, Constr. Q. M., New London, Conn., for the construction of a bakery building, plumbing, and installing heating apparatus and electric wiring and fixtures in same, at Fort H. G. Wright, N. Y.

*SYRACUSE, N. Y.—Bids are asked by Charles D. Watson, Consult. Engr., Saranac Lake, N. Y., until March 1, for buildings and equipment of a concrete products factory for the Onondaga Litholite Co., Syracuse. We are officially advised that the main building will be of reinforced concrete, 250 × 45 ft. The pattern shop, stone bins, offices, etc., will be in a 200 × 20-ft. frame building. Equipment consisting of cranes, derricks, stone crushers, rolls, elevators, screens, concrete mixer and special machinery, all separately motor driven, will be required.

NIAGARA FALLS, N. Y.—We are informed by Chester R. Phelps, Arch., Gluck Bldg., that he is preparing plans for a 2-story brick factory building, 80 × 30 ft., which the International Nut Co. will add to its plant at Cayuga and 24th Sts. and the N. Y. C. R. R. tracks. R. A. Ellis is Pres. Estimates are being taken. Noted last week.

BUFFALO, N. Y.—We are officially advised that the Frontier Ice Co., Gordon F. Matthews, Secy., 997 Ellicott Sq., will build an ice manufacturing plant, 81.4x179 ft., concrete block and steel at Lathrop St. and New York Central Belt Line tracks, to cost $30,000. Plans have been prepared by J. A. Matthews, Arch., 444 Rhode Island St. Bids are being received by the Secretary of the company. The rear of the building will be for ice manufacturing and the front for storage purposes.

The Washburn Crosby Co. will erect a grain storage elevator, of concrete and steel, 200 × 70 ft., on the Blackwell Ship Canal and the Buffalo Creek Terminal R. R. at South Michigan St., adjoining the 7-story steel and brick flouring mill which it has under construction. The storage bins will be of concrete, each 33 ft. in diameter and 90 ft. in height with a total capacity of 850,000 bushels. The cost will be about $200,000. Frank F. Henry is Eastern Mgr., 1201 Chamber of Commerce Bldg., Buffalo.

A 1-story warehouse, 100 x 115 ft., of steel and corrugated iron construction, is to be built by the American Radiator Co. at its Pierce plant, Elmwood Ave. and the New York Central R. R. Contract has been awarded to MATTHEWSON & PARSONS, 100 Law Exchange.

NEWARK, N. J.—We are officially advised that work will be begun at once rebuilding the plant of L. Goldsmith & Sons at Canal and Cherry Sts. A contract providing for the erection of seven 4-story brick buildings has been awarded to the HENRY M. DOREMUS CO., 79 Orange St., Newark. The plans drawn by Henry Baechlin, Arch., 35 Clinton St., Newark, for the structures call for an expenditure of about $100,000. The Goldsmith plant was destroyed by fire several months ago.

PHILADELPHIA, PA.—Wolstenholme & Clarke, worsted yarn manufacturers of Manayunk, have bought a plot of ground, 400 x 700 ft., in this city, on which they will erect a new plant, to which they will remove when completed. They propose to erect a 5-story reinforced-concrete building of mill construction, and will equip the plant.

The CHARLES McCAUL CO., Tenth and Sansom Sts., have been awarded contracts for a 2-story machine shop, 84 x 184 ft., and a 1-story warehouse, 43 x 91 ft., to be built at the Henry Disston & Sons saw works in Tacony. The cost will be $49,600.

NORFOLK, VA.—The Surry Lumber Co., Union Trust Bldg., Baltimore, Md., will build a planing mill with a daily capacity of about 200,000 ft. of lumber. The company has purchased a site of 36 acres fronting 700 ft. on Elizabeth River. It will install from 15 to 20 machines and accompanying equipment. Concrete construction will be considered. The company will use either electric or steam power. It may build a box-shook factory. It will build docks, construct railway switches and provide other facilities.

FLAT ROCK, N. C.—The Skyland Hosiery Co., of this city, expects to build a dyeing and finishing plant with a daily capacity of 2,000 dozen pairs of hosiery. Cost, about $25,000.

GREENVILLE, S. C.—The Woodside Cotton Mills, Greenville, will enlarge its plant, the machinery having been contracted for. The company will provide the new mill for an equipment of 25,000 spindles and 700 looms, to produce wide print cloths, its present output. The Woodruff Mill is operating 45,000 spindles and 800 looms and employs 600 persons. John T. Woodside is Pres. The addition will increase the capital to over $1,000,000.

WAYNESVILLE, GA.—The Upson Mfg. Co. will remove its plant from this city to Forsyth, Ga., and will erect modern buildings. A site has been secured. The company operates 3,500 ring spindles. J. W. Newton is Pres.

ATLANTA, GA.—The Southern Cotton Stalk, Pulp & Paper Co., Atlanta, Ga., which proposes to manufacture paper out of cotton stalks, is planning to build its first mill. Estimated cost, about $75,000.

SHREVEPORT, LA.—The Louisiana Oil Co., Col. G. W. Hardy, Mgr., Shreveport, La., has purchased 500 acres of land adjoining Shreveport and will erect a large plant for separating fuel oil from the raw product from the Cadder field.

CINCINNATI, OHIO.—Martin Fisher, Arch., 2156 Central Ave., has awarded to the M. MARCUS BLDG. CO., 1517 Plum St., the contract for rebuilding a 3-story brick manufacturing plant, on Charlotte and Plum Sts., for the Patent Wood Keg Co. Cost, $15,000.

ANGOLIA, IND.—The United States Machine Co. has arranged to build a 2-story, 50 x 300-ft. factory building in this city. The Angola Commercial Club will furnish information.

INDIANAPOLIS, IND.—The State Board of Agriculture, Charles Downing, Room 12, State House, Secy., is preparing to ask for bids for the construction of a machinery hall on the State Fair Grounds. Estimated cost, $160,000.

ANDERSON, IND.—The Gospel Trumpet Publishing Co. has ordered plans and will soon ask for bids for the erection of a large printing plant in this city. John H. Martin is Mgr.

COLUMBIA CITY, IND.—The Columbia City Mill & Elevator Co., recently incorporated, will receive bids for the construction of a grain elevator and a flouring mill. J. C. Miller is Pres.

*HOT SPRINGS, S. DAK.—Bids will be received at the office of the Treasurer, Battle Mountain Sanitarium, N. H. D. V. S., Hot Springs, Fall River County, until noon, March 5, for the installation of an ice making plant in accordance with instructions and specifications, copies of which, with blank proposals and other information may be had upon application to W. A. Tucker, Treas.

ORANGE, TEX.—The Yellow Pine Paper Mill Co., capital stock, $200,000, will triple the capacity of its mill to 30 tons daily. Additional machinery will be installed as follows: Four digesters, evaporators, rotary furnaces, elevator and conveying machinery, 700-HP. engine, small engines, 1,000-HP. boiler, etc. Equipment to be in position by July 1. E. G. Goodall is Mgr.

PORT TOWNSEND, WASH.—The MORAN CO., of Seattle, has received the contract from the James A. Moore Investment Co. for the construction of a complete steel plant, to be installed at Irondale, near Port Townsend. Work is to begin immediately.

WINNIPEG, MAN.—Bids will be received by P. Ryan, Secy., National Transcontinental Ry. Commission, Ottawa, Ont., until noon, March 10, for the erection of terminal shops here. Plans and specifications may be seen at the office of Hugh Lumsden, Ch. Engr., Ottawa, or at the office of S. R. Poulin, District Engr., St. Boniface, Man.

MISCELLANEOUS CONTRACTS.

(* *denotes that this work is advertised in Engineering News.*)

U. S. RECLAMATION SERVICE.—Items regarding irrigation, canal projects, etc., will be found under Water Supply—Irrigation.

DITCH.—Ringsted, Iowa.—The County Board has let the contract for the construction of the ditch near Ringsted to the ARMSTRONG CEMENT WORKS, of Armstrong, Iowa, at $7,500.

REPAIRING DIKES, ETC.—Savannah, Ga.—Bids will be received by Col. Dan. C. Kingman, Corps Engrs., U. S. A., until March 5 for raising and repairing dikes and training walls in Savannah Harbor.

DRAINAGE DITCHES. — Emmetsburg, Iowa.—Bids will be received until March 3 by the Board County Supervisors for constructing drainage ditches Nos. 29 and 32. Sim. R. Stedman is County Audr.

STONE.—Grand Rapids, Mich.—Bids are asked by Col. M. B. Adams, Corps Engrs., U. S. A., until 3 p. m., March 5, for furnishing stone for pier filling at St. Joseph and South Haven Harbors, Michigan.

REPAIRING FOUNDATION LOCK.—Ottawa, Ont.—Bids are asked until 4 p. m., Feb. 16, by L. K. Jones, Secy., Dept. of Railways & Canals, Ottawa, for repairing foundation lock No. 2, Welland Canal.

CEMENT, ETC.—Baltimore, Md.—Bids are asked until 11 a. m., Feb. 17, by the Board of Awards for furnishing cement, sand, stone (crushed), gravel, brick, lumber, and hauling bulk material. Charles E. Phelps, Jr., is Ch. Engr.

AUTOMOBILE.—Cincinnati, Ohio. — Bids are asked by the Board of Public Safety until 10 a. m., Feb. 16, for furnishing and delivering to the Fire Department one 60-HP. automobile, complete. J. J. Mulvihill is Secy. Bd.

COAL SHED.—California City Point, Cal.—Bids will be received at the office of the Bureau of Equipment, Washington, D. C., until March 1 for constructing a coal shed at the U. S. Naval Coal Depot, California City Point.

DITCH.—Elbow Lake, Minn.—Bids will be received until Feb. 19 by O. E. Wold, County Audr., for constructing county ditch No. 9, involving about 86,350 cu. yds. of excavation. Estimated cost, $13,300. O. G. Molden is Engr., Fergus Falls.

RIVER IMPROVEMENT.—Buffalo, N. Y.—Bids are asked until 11 a. m., March 5, by the Department of Public Works for the construction of subdivision "A" of Section 2 of the Buffalo River and Cazenovia Creek improvement. F. G. Ward is Comr.

DOCK.—Knife River, Minn.—The Duluth & Northern Minnesota Ry. Co. has awarded a contract to the BARNETT & RECORD CO. for the construction of a dock at Knife River, seven miles from Two Harbors. The dock will be of concrete and will cost about $50,000.

*DREDGING.—Mobile, Ala.—The contract for dredging in Mobile Harbor was awarded on Feb. 3 by Maj. H. Jervey, Corps Engrs., U. S. A., to the BOWERS SOUTHERN DREDGING CO., Galveston, Tex., at 9.95 cts. per cu. yd. List of bidders noted on Jan. 21.

DITCH.—Redwood Falls, Minn.—Bids are asked by L. P. Larson, County Audr., until Feb. 11 for constructing Judicial ditch No. 2, requiring about 53,698 cu. yds. of excavation, 8,336 ft. of 6-in., 14,473 ft. of 8-in., and 11,705 ft. of 10-in. tile. Estimated cost, $10,499.

DRAINAGE.—Hampton, Iowa.—Bids are asked by F. G. Luke, County Audr., until Feb. 17 for the following drainage work: Franklin-Hardin district No. 1, open ditch and tile laterals; district No. 5, open ditch, about 44,357 cu. yds.; Wisner-Richland drainage district No. 4, tile drain.

HOSE WAGONS.—Winnipeg, Man.—Bids will be received by M. Peterson, Secy. of the Civic Board of Control until 11 a. m., Feb. 24, for the supply of two high-pressure hose wagons for the Fire Department. Specifications and form of proposal may be obtained from J. E. Buchanan, Ch. Fire Dept.

DITCH.—Newtown, Ohio.—Bids will be received by the Council of the Village of Newtown, at the office of the Clerk, until noon, Feb. 27, for furnishing the necessary labor and material for constructing a ditch or drain from the south side of Main St. to Clear Creek. Edgar M. Griffith is Clk.

CEMENT.—San Francisco, Cal.—Contract has been awarded to the PACIFIC PORTLAND CEMENT CO., CON., Pacific Bldg., San Francisco, for furnishing 25,000 bbls. of Portland cement for use in the Pacific Coast District of the Reclamation Service. The contract price is $1.55 per bbl. f. o. b. cars at Tolenas, Cal.

BEACONS.—Tampa, Fla.—Bids for the erection of six range beacons in Tampa Bay, Fla., were opened on Jan. 26 by the Light House Engineer as follows. EDWARD CONSTRUCTION CO., Tampa, $6,500 (awarded contract); G. H. Langley, Pensacola, Fla., $8,737; George W. Brown, West Palm Beach, Fla., $12,000.

DITCH.—Des Moines, Iowa.—The Board of Supervisors on Jan. 25 let the contract for the Four Mile-Lee Township drainage ditch to the INTERSTATE DRAINAGE & INVESTMENT CO., Britt, Iowa, at 15 cts. a yd. It is estimated that the ditch will cost from $15,000 to $20,000 to complete, as it is about 1½ miles long. Bidders noted on Jan. 28.

MOORING STONES.—Portland, Me.—Bids will be received at the office of the Lighthouse Inspector, Portland, Me., until noon, March 17, for furnishing mooring stones for the first lighthouse district, for the fiscal year ending June 30, 1910. Specifications, with blank proposals and other information, may be had upon application to the Lighthouse Inspector.

CABLE.—Washington, D. C.—The following bids were opened by the Chief Signal Officer, U. S. Army, Washington, on Feb. 2, for furnishing 6,500 ft. of cable, type 321, specification 309: Standard Underground Cable Co., Pittsburg, Pa., 21 cts. per ft.; reels, $35. National Conduit & Cable Co., New York, 34.3 cts.; reels, $12. Western Electric Co., New York, 21.3 cts.; reels, $50.

TIMBER.—Ottawa, Ont.—Bids are asked by W. W. Cory, Deputy of the Minister of the Interior, until noon, Feb. 22, for 144 cedar posts and 113,000 ft. best quality spruce timber of various dimensions up to 6 in. x 6 in. and 27 ft. long, to be supplied not later than April 8, 1909. Specifications may be seen at the office of the Chief Astronomer, Dominion Observatory, or will be sent by mail on application.

DITCH.—Fowler, Ind.—Bids will be received until Feb. 18 by the County Surveyor, Benton County, Fowler, for constructing the W. B. Curtis joint ditch in Round Grove Township, eight miles north of Otterbein, the ditch consisting of 7,100 ft. of 12, 14, 16 and 18-in. tiles and 31,300 ft. of dredge work. The work is to be let in two contracts, tile and dredge. Chester B. Whicker is Supt. Construction.

CLEANING DITCHES.—Harvel, Ill.—Bids will be received until Feb. 23 by the Board Drainage Commissioners, Thos. Commerford, Pres., Harvel, for cleaning out the open ditches of Union Drainage Dist. No. 1, towns of Bois D'Arc and Harvel, as follows: 29,920 lin. ft. of main ditch and 5,890 ft. of lateral ditches, estimated to require the excavation of 10,860 and 1,870 cu. yds., respectively. J. W. Dappert is Engr., Taylorville.

TUNNEL.—St. Paul, Minn.—The contract for the construction of the reinforced concrete tunnel at Westminster St., here, for the Minneapolis, St. Paul and Sault Ste. Marie Ry. Co., Thos Lowry, Minneapolis, Pres., has been awarded to W. J. HOY & CO., Chamber of Commerce Bldg., St. Paul, Minn. It will be 1,280 ft. in length and must be completed by July 1 that work on the new terminals for the Soo may be started. Cost, $600,000.

*TELEPHONE LINE.—Winnipeg, Man.—Bids are asked by the Chairman of the Board of Control, until 11 a. m., March 2, at the office of M. Peterson, Secy., for the supply and delivery of material for and the erection of a telephone line between Point du Bois and Winnipeg, and the supply and delivery of certain repair shop equipment. Smith, Kerry & Chace, Confederation Life Bldg., Toronto, Ont., and Carnegie Library Bldg., Winnipeg, are Engrs.

LUMBER.—New York, N. Y.—Bids were received as follows on Feb. 4 by the Parker Board for furnishing and delivering lumber for parks in Manhattan Boro.: East River Mill & Lumber Co., 92d St. and East River, New York, $11,429; A. C. Jacobson & Sons, 81 Building St., Brooklyn, $12,079; George H. Storm & Co., $11,605; John T. Stevens, no total; W. P. Younge & Bros., $11,457; Charles H. Heinsohn, $11,956; Bellfour & Koch, $13,463. Henry Smith is Pres. Bd.

PILES.—Bay City, Mich.—Bids will be received until Feb. 11 by the Bay City Park Commission for 60 piles, 35 ft. long, and 200 piles, 30 ft. long, piles to be from 14 to 16 ins. at the butt and from 8 to 10 ins. at the small end. Piles shall be cut from sound, live trees, and shall be close grained and solid, free from defects, such as injurious rings and large, unsound knots. Piles are to be either tamarack or oak, and are to be delivered at Wenonah Park, Bay City.

DRAINAGE DITCHES AND LEVEES.—Atkinson, Ill.—Bids were received on Feb. 6 by the Commissioners of the Drainage Union District Number One of the Towns of Atkinson and Alba, in Henry County, for the construction of 41,300 ft. of open ditches with a total estimated excavation of 163,300 cu. yds. and 3,400 ft. of levees with an estimated fill of 2,800 cu. yds. The contract has been let to KNIGHT & BOWEN, of Madison, Wis., at 10 cts. per cu. yd. H. E. Reeves, Atkinson, Ill., is Engr.

*REMOVING WRECKS.—Boston, Mass.—Bids were received as follows on Feb. 6 by Lieut.-Col. Edw. Burr, Corps Engrs., U. S. A., for removing wrecks of steamers "Germani" and "Reindeer," canal boats "Geo. D. Cull," "John R. Myers," "North Star," "E. D. Case," "Richmond," "William Parker," "F. J. Bailey," "Governor Roosevelt," "Georgie T," and "Armenia Allore," and hulks of eight other canal boats, names unknown, in the narrows of Lake Champlain, New York and Vermont, unless otherwise removed within 30 days: Emmett M. Burlingame, Littleton, N. H., $9,091; John B. Whealton, Jr., Norfolk, Va., $6,025; John J. Fitzpatrick, Plattsburg, N. Y., $9,800; Mark Townsend, Linwood, N. J., $14,750; James E. Cashman, Burlington, Vt., $6,250; Nathaniel E. Gordon, South Portland, Me., $4,337; George Neddo, Whitehall, N. Y., $6,900; Van Sant & Gandy, Atlantic City, N. J., $7,200; Robert Weston, Rouse Point, N. Y., $4,249; Johnston & Virden, Lewes, Del., $3,440; Alfred Sorensen, Boston, Mass., $14,444.

CIVIL SERVICE EXAMINATIONS.

WATER-WORKS SUPERVISOR.—Minneapolis, Minn.—An examination will be held in the office of Andrew Rinker, City Engr., Minneapolis, on Feb. 15, for candidates for the position of Supervisor of Water-Works. The city wishes to secure the services of an expert Hydraulic and Mechanical Engineer to take charge of its water-works system.

ASSISTANT SUPERINTENDENT.—Atlanta, Ga.—The U. S. Civil Service Commission announces an examination on March 17 to secure eligibles from which to make certification to fill a vacancy in the position of Assistant Superintendent of Construction, U. S. Penitentiary, Atlanta, at $1,600 a year, and vacancies requiring similar qualifications as they may occur. Age limit, 20 years. Application Form 1312.

ROLLER MAKER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on March 17, to secure eligibles from which to make certification to fill a vacancy in the position of Roller Maker, Bureau of Engraving and Printing, at $1,100 a year, and vacancies requiring similar qualifications as they may occur in that bureau. No educational test will be given, and it will not be necessary for applicants to appear at any place for examination. Age limit, 20 years. Application Form 1093. Applications must be filed prior to closing hour on March 17.

MECHANICAL AND ELECTRICAL ENGINEER.—Fort Bayard, N. Mex.—The U. S. Civil Service Commission announces an examination on March 17-18, to secure eligibles from which to make certification to fill a vacancy in the position of Mechanical and Electrical Engineer, $1,200 a year, Quartermaster's Department at Large, Fort Bayard, N. Mex., and vacancies requiring similar qualifications as they may occur in any branch of the service. Age limit, 20 years. Application Form 1312.

INDUSTRIAL NOTES.

A. L. SONDEREGGER, consulting hydraulic engineer, announces the removal of his offices to Rooms 634 and 635 Central Bldg., Los Angeles, Cal.

THE WELLMAN-SEAVER-MORGAN CO., Cleveland, Ohio, announces the appointment of F. H. Bostwick as manager of its general Western office, located at 611 Ideal Bldg., Denver, Colo.

THE PELTON WATER WHEEL CO. announces the removal of its executive and sales offices from 19th and Harrison Sts. to the Monadnock Building, 3d and Market Sts., San Francisco, Cal.

WM. B. SCAIFE & SONS CO., Pittsburg, Pa., has received contract from the Maryland Coal Co. for a steel tipple and trestle, to be erected at St. Michael, near Johnstown, Pa. The tipple will be one of the largest ever constructed in that part of the state.

THE LARGE ORDER for the complete fuel equipment of the Coronet Phosphate Co., of Coronet, Fla., has been awarded to the Tate, Jones & Co., Inc., Pittsburg, Pa., and consists of the "Kirkwood" oil system, comprising burners, pumping, heating and regulating equipment, etc.

THE BARBER ASPHALT PAVING CO. announce the organization of its mastic, cement and waterproofing department in New York City with offices in the Hudson Terminal Bldg., 30 Church St. This department wil handle rock asphalt, mastic floors and pavements, waterproofing in all its branches by the positive seal method, cement work of all descriptions, cork insulation, reinforced concrete, including brewery, malt house and resrvoir work. This branch of the business is under the management and has the services of a corps of efficient graduate engineers with Mr. J. Lee Allen as Manager.

For other Proposal Advertisements see pages 47, 48, of Advertisements and Construction News page 50.

SUPPLY OF ASPHALT.

Winnipeg, Man.

Sealed tenders addressed to the Chairman Board of Control for the supply of from 2,500 to 3,500 tons of Asphalt for street paving for the City of Winnipeg, will be received at the office of the undersigned up to 11 a. m. on Wednesday, February 24th, 1909.

Specifications and forms of tender, together with conditions governing tenders as prescribed by by-law may be obtained at the office of the City Engineer, James Street, Winnipeg. The Board reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the city.

M. PETERSON, Secretary.

Board of Control Office,
Winnipeg, Feb. 3, 1909.

CONSTRUCTION AND EQUIPMENT.

CITY OF WINNIPEG, MAN.
Point du Bois Hydro-Electric Development.

Sealed tenders on prescribed forms, addressed to the Chairman of the Board of Control, Winnipeg, Canada, and marked on the envelope "Point du Bois Hydro-Electric Development, tender for ....." (here add the particular item or items as below) will be received at the Office of the undersigned up to 11 a. m. on Tuesday, 2d of March, 1909, for the supply and delivery of material for and the erection of a telephone line between Point du Bois and Winnipeg, and the supply and delivery of certain Repair Shop Equipment.

Copies of the Instructions to Bidders, Plans, Specifications and Forms of Tender may be obtained at the Power Engineer's Office, Carnegie Library, Building, Winnipeg, Manitoba.

These Specifications, Plans, etc., may also be seen at the offices of Smith,

Kerry & Chace, Confederation Life Building, Toronto, Ontario.

Each tender must be accompanied by a certified cheque payable to the order of the City Treasurer for the sum called for in the corresponding "Instructions to Bidders," which cheque will become forfeit to the Corporation in the event of the successful tenderer refusing or neglecting to sign a satisfactory contract when called upon to do so.

Individual tenders will be received for:

x 16—Insulators.
3—Telephone Line.
14—Erection of Transmission Line.
28A—Repair Shop Equipment.

As a further alternative, tenderers may include or group together numbers 3 and 14 providing that they have also tendered for each individually.

The Board reserves the right to reject any or all tenders or to accept any bid which shall appear advantageous to the City of Winnipeg.

Office of the Board of Control,
Winnipeg, Man., February 5th, 1909.
M. PETERSON,
Secretary.

x. The numbers are those of the different volumes of specifications.

SEWAGE DISPOSAL AND PLUMBING.

Kings Park, N. Y.

Sealed proposals for Sewerage and Sewage Disposal Works; and Alterations to Plumbing, Wards 41, 42, 43, 44, 47, 48 and 49. Plumbing and Construction, at the Kings Park State Hospital, Kings Park, N. Y., will be received by the State Commission in Lunacy at the Capitol, Albany, N. Y., up to 3 o'clock P. M. on February 24th, 1909, when they will be opened and read publicly.

Proposals shall be accompanied by certified checks in the sum of $2,000 for Sewerage and Sewage Disposal Works; $500 for Alterations to Plumbing, and the contractors to whom the awards are made will be required to furnish surety company's bonds in the sum of $20,000 for Sewerage and Sewage Disposal Works; and $3,000 for Alterations to Plumbing. The right is reserved to reject any and all bids.

Drawings and specifications may be consulted and blank forms of proposal obtained at the Kings Park State Hospital, Kings Park, N. Y.; also at the office of the State Commission in Lunacy, No. 1 Madison Avenue, Room 5212, New York City, and at the office of the State Architect. Complete sets of plans and specifications will be furnished to prospective bidders upon reasonable notice to and in the discretion of the State Architect, Franklin B. Ware, Albany, N. Y.

Dated Albany, N. Y., Feb. 1, 1909.
T. E. McGARR, Secretary,
State Commission in Lunacy.

PAVING.

Department of Public Works.
Bureau of Highways.
Office, 232 City Hall,
Philadelphia, February 4, 1909.

Sealed proposals, endorsed "Bids for the items bid for," and addressed to the undersigned, at the office above mentioned, will be received until 12 o'clock noon on Monday, February 15, 1909, for Repaving Market Street from Delaware Avenue to Bridge over Schuylkill River with selected Eastern Granite Blocks, Best Quality of Refined Natural Asphalt or Wood Blocks.

Specifications and blank forms upon which bids must be made can be obtained upon application at the Office of the Bureau of Highways, Room 232 City Hall.

This advertisement is made and bids will be received pending Ordinance of Councils authorizing the repaving of Market Street and subject to appropriation to be made by Councils.

No bid will be considered unless accompanied by a certificate from the City Solicitor that the provisions of an ordinance requiring proposal bonds when the bids exceed in amount five hundred dollars, approved May 25, 1860 (p. 81 West), have been complied with.

The Director reserves to himself the right to reject any or all bids, as he may deem best for the interests of the city.

GEO. R. STEARNS,
Director.

CONCRETE BRIDGE AND GRADING OF WARD AVENUE, MAMARONECK, N. Y.

Sealed proposals for the construction of a concrete arch bridge and the grading and otherwise improving 750 lineal feet of Ward Avenue, will be received by the Board of Trustees of the Village of Mamaroneck, Westchester County, N. Y., at the Village Rooms, until 8.30 o'clock p. m., on the 24th day of February, 1909.

An approximate estimate of the work to be done is as follows:

3,000 cubic yards excavation for grading street; one 35-ft. span reinforced concrete arch bridge, 50 feet in width.

Each bid must be accompanied by a certified check for a sum equal to five (5) per cent. of the amount of the bid.

A Surety Company bond for an amount equal to twenty-five (25) per cent. of the bid will be required.

The Board of Trustees reserves the right to reject any and all bids.

Plans and specifications may be seen and bidding forms obtained at the office of the Village Clerk, Mamaroneck, N. Y., or at the office of John M. Farley, Engineer, No. 5 Court Street, White Plains, N. Y.

DANIEL WARREN,
President.
CHAS. W. BUCKTER, Clerk.

ENLARGING DAM.

Lebanon, Pa.

Sealed proposals for the work of enlarging Dam No. 2 of the Gravity Water Supply of the city of Lebanon, Pa., and increasing the efficiency thereof, will be received by the Board of Water and Lighting Commissioners of the City of Lebanon, Pa., at the City Hall, until Thursday, March 11th, 1909, at 5 o'clock p. m.

The work will include about 33,000 cubic yards of earth in the dam breast, concrete intake tower about 52 feet high, etc.

A bond in the sum of $10,000 will be required and a certified check for $1,000 must accompany each bid.

Forms for proposals and specifications may be had, and plans seen only at the office of the City Engineer, City Hall, Lebanon, Pa.; on and after March 4th, 1909.

Only proposals made out on the regular forms will be received. The right to reject any and all bids is reserved.

By order of the Board
J. D. KERR, Secy.
T. R. CROWELL, C. E.,
City Engineer.

BUILDING.

Buffalo, N. Y.

Sealed proposals for Tuberculosis Building, Construction, including Heating, Plumbing and Electric Work, at the Buffalo State Hospital, Buffalo, N. Y., will be received by the State Commission in Lunacy at the Capitol, Albany, N. Y., up to 3 o'clock P. M. on February 24th, 1909, when they will be opened and read publicly.

Proposals shall be accompanied by a certified check in the sum of $300 and the contractor to whom the award is made will be required to furnish surety company's bond in the sum of $3,000. The right is reserved to reject any and all bids.

Drawings and specifications may be consulted and blank forms of proposal obtained at the Buffalo State Hospital, Buffalo, N. Y., and at the office of the State Architect. Complete sets of plans and specifications will be furnished to prospective bidders upon reasonable notice to and in the discretion of the State Architect, Franklin B. Ware, Albany, N. Y.

Dated Albany, N. Y., Feb. 1, 1909.
T. E. McGARR, Secretary,
State Commission in Lunacy.

SEWER.

OFFICE OF THE COMMISSIONERS OF SEWERAGE OF LOUISVILLE, KY.
Incorporated.

Sealed proposals for the construction of a sewer, known as Section "B" of the Castlewood Sewer, Contract No. 26 of the Comprehensive System of Sewerage for the City of Louisville, Ky., will be received at the office of the Commissioners of Sewerage until 12 o'clock noon, March 5th, 1909.

The work will consist mainly of building a concrete sewer about 2,770 feet long; size, 36 inches to 42 inches; depth, 9 ft. to 18 ft., and including about 675 cu. yds. of concrete.

Plans and specifications may be seen at the office of the Commissioners and at the office of Harrison P. Eddy, Consulting Engineer, 14 Beacon St., Boston, Mass.

Sealed bids should be endorsed "Proposals for Section "B," Castlewood Sewer," and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by a certified check for at least seven per cent. (7%) of the total amount of the bid, or a "Bidder's Bond" as described in the form of proposal.

W. C. NONES, Chairman.
CHAS. P. WEAVER, Secy. & Treas.
J. B. F. BREED, Chief Engineer.

Situations Wanted

Mechanical and Electrical Engineers.

ENGINEER, age 30, Assoc. Mem. A. S. M. E., A. I. E. E., testing, design, reports, construction and railroad experience, wishes position about March 1. Address "D. B. 6," Engineering News, New York. 6-8t

POSITION WANTED by M. E. technical graduate, 5 years' experience. Address "P. A. 6," Engineering News, New York. 6-5t

Civil Engineers.

GRADUATE C. E., age 31, six years' experience in hydraulic and railroad work, desires position in office or field. Address "R. L. A.," 839 Fourth St., Lancaster, Pa. 6-2t

CIVIL ENGINEER, technical education, eight years' experience, including municipal engineering, road construction, land development, railroad construction; now employed; desires change. Address "X. B. 6," Engineering News, New York. 6-3t

Bridge and Structural Engineers.

COMPETENT and responsible structural engineer, ten years' experience in the design of all classes of mill and higher building work, desires position as structural engineer in architect's office on salary or percentage basis. Well recommended. Address "R. A. 6," Engineering News, New York. 6-1t

Surveyors.

INSTRUMENTMAN, computer and draftsman on topographical and land surveys. Can take charge. References, etc. Address "Z. B. 6," Engineering News, New York. 6-2t

Draftsmen.

DRAFTSMAN, mechanical, young man with 3½ years' experience on A. C. motors and general machine details, wishes position. Address "S. A. 6," Engineering News, New York. 6-1t

Superintendents, Misc., etc.

CONSTRUCTION WORK in New York City. 1908 scientific graduate wants position as time keeper, or such an actual job. Room 334 Schermerhorn St., Brooklyn. 6-1t

MANAGER OF SALES; good organizer; has executive ability; thoroughly experienced in Portland cement line; open for negotiations. Address "A. B. 6," Engineering News, New York. 6-2t

YOUNG MAN (25), fourth year Cooper Union student, desires position with engineer or contractor, where responsibility and steadiness are required; not afraid of work or hours. Address "B. 5," Engineering News, New York. 6-2t

A LIVE YOUNG MAN, with technical education, executive ability and 14 years' experience in detailing, estimating and superintending, desires a position with structural and ornamental iron works or general contractor. Address "W. A. 6," Engineering News, New York. 6-1t

OVERHEAD CONST. SUPT., with fifteen years' experience on electric railway and transmission work, desires position with good firm; strictly sober, energetic, good organizer and can get results. At liberty March 1. Address "O. A. 6," Engineering News, New York. 6-3t

MEXIC

YOUNG ENGINEER (30), [illegible] good experience in designing, est[illegible]ng and closing contracts on struct[illegible] steel and reinforced concrete work [illegible]aking Spanish well, desires positi[illegible] Mexico. All references. Address "Q [illegible] Engineering News, 1636 Monadnock [illegible]k, Chicago. 6-1t

Situations O[illegible]en

WANTED—Young man, tec[illegible]l graduate C. E. or architect with [illegible]it for suburban surveys and constr[illegible]n 15 miles from N. Y. City. Write [illegible] particulars. Address "E. B. 6," Eng[illegible]ring News, New York. 6-1t

WANTED—Young man as as[illegible]nt in editorial office of mechanical [illegible]al in New York. Applicant must w[illegible] good English. Editorial experience [illegible]rable but not necessary. Some engi[illegible]ing experience and general knowledge [illegible] engineering progress essential. St[illegible] experience fully. Address "F. B. 6, [illegible]Engineering News, New York. 6-1t

WANTED—Railroad Man of Ex[illegible]nce. Signal engineer preferred, as [illegible]nager for railway signal company. Mu[illegible] have tact, first-class business qualifi[illegible]ns, complete knowledge of block sig[illegible] and train rules, interlocking plants, electro, pneumatic and automatic, and all up-to-date semaphore signaling, construction, etc. Permanent position and good opening for right man. Address GEO. W. ZEIGLER, Philipsburg, Pa. 6-2t

Miscellaneous Wants

WANTED—Surveyor's Outfit, Level, etc.; condition; bargain. Address "C. B. 6," Enginereing News, New York. 6-1t

WANTED.

2½-yard or larger HARBOR DIPPER DREDGE to excavate 42 feet below water surface; also DUMP SCOWS; also TRENCH EXCAVATOR. Give full particulars.

STANDARD CONSTRUCTION COMPANY,
First National Bank Building, Chicago. 6-1t

FOR SALE

FOR SALE.

Improved A Marion Steam Shovel

good condition. High shop number. Address "X 6," Engineering News, New York. 6-1t

FOR SALE.

1—Little Giant Steam Shovel, 3 sets engines. New last year.
1—15-ton Kelley Road Roller.
1—7-ton Porter S. T. 36" gage Loco. Overhauled and never used.

Complete contractor's plant, Hoisting Engines, Derricks, Concrete Mixers, Buckets, etc. J. F. FOSTER,
15 Federal St., Boston, Mass.
Telephone, Main 1423. 6-1t

FOR SALE OR RENT.

2—70-ton Bucyrus Steam Shovels.
6 Baldwin Locomotives (36" gage).
50—4-yd. Shannon dump cars (36" gage).
20—3-yd. Shannon dump cars (36" gage).
2 Western grading machines.
16 Bottom dump wagons.
6 Mundy Hoisting Engines (D.D.-D.C.).
2 No. 5 Champion Crushers—with boilers and engines complete.
100 tons 50-lb. rail, with angle bars.

The above contractor's plant is practically new and in first-class condition.

Address
NOLAN BROS.,
Reading Pa. 6-3t

WE SUPPLY
BOOKS ON ANY SUBJECT
Engineering News Book Department

Suppl[illegible]

CONSTRUCTION
Plans and Sp
List of Contr
Railway ...
Electric Rail
Light and P
Bridges ...
Buildings ...
Water Supp
Sewerage ...
Streets and
Manufacturi
Miscellaneou
U. S. Posses
Contract P
INDUSTRIAL
TRADE PUBL
PROPOSALS

CONST

Plans and

(* denotes t
E

The followin
(S.) are on
of The Engi
220 Broadway

Bids close.

2-20*W.-Wk
2-20 Sewer,
3- 1 Paveme
3- 1*Power
3- 5 Repair
Ga.
3-11 Pumpi
Mo.

List

LIGHT, H

2-24 Condu
3- 1*Power
3- 2 Wirin
3- 2 Trans
Man
3-22 Elec.

2-18 Brid
2-20 Brid
2-20 Brid
2-24 Brid
2-24 Brid
2-25 Brid
Ka
3- 2 Brid
3- 2 Brid
3- 3 Brid
3- 4 Brid
3- 5 Brid
3- 6 Brid
3- 8 Sup
3- 8*Sup
4- 5 Brid

2-18 Sch
2-20 Wa
2-20 Bui
2-20 Pos
2-20 Pla
2-20 Pla
2-22 Pos
2-23 Ad
2-23 Ad
2-23 Bu
2-23 Sa
C
2-23 Bu
2-23 Bu
2-23 Bu
2-23 Po
2-23*Co
2-24 Bu
2-24 Ri
2-24 Ja
2-24 Po
2-25 W
2-27 T
3- 1 S
3- 1 C
3- 1 B

3- 1*F

3- 1*C
3- 1 F
3- 1 M

3- 1 F
3- 8 F
3- 5*F

3- 8*
3- 9
3-10
3-10
3-10

2-19
2-19
2-19
2-20
2-20
2-20
2-20
2-22